

ARMY-NAVY INTEGRATION AND THE PIVOT TO THE WEST: A NEW JOINT CONCEPT

A Monograph

by

LCDR Kirk A. Sowers

United States Navy



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

AY 2014-001

REPORT DOCUMENTATION PAGE

 Form Approved
 OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION.

1. REPORT DATE (DD-MM-YYYY) 22-05-2014	2. REPORT TYPE Master's Thesis	3. DATES COVERED (From - To) JUL 2013 - MAY 2014		
4. TITLE AND SUBTITLE Army-Navy Integration and the Pivot to the West: A New Joint Concept		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) KIRK, A. SOWERS LIEUTENANT COMMANDER, USN Surface Warfare Officer		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD 100 Stimson Ave. Fort Leavenworth, KS 66027-2301		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT In a period of budget and personnel reductions, the U.S. military's separate services often develop new doctrinal concepts in an effort to secure a greater share of scarce defense dollars. It appears the Department of Defense is entering another such period. Currently, the Army and Navy lack the necessary joint operational concept required for further doctrinal development and training that support the President's strategic guidance for the pivot to the West. The analysis that follows focuses on land and sea force integration for future joint operations by demonstrating such operations' importance in historical case studies from the Civil War. The research presented here fits into one of two categories: military service requirements for operational concept development related to the 2010 NSS and 2012 DSG, and the mediating factors that either support or impede DOD concept development. This study suggests that the Army and Navy presently lack the necessary joint operational concept required to guide doctrinal development and training to support the strategic guidance in the 2010 NSS and 2012 DSG – a shortfall that the services' concept and doctrine developers should correct.				
15. SUBJECT TERMS Joint Operations, Army-Navy Integration, National Security Strategy, Defense Strategic Guidance, Pivot West				
16. SECURITY CLASSIFICATION OF: a. REPORT Unclassified		17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 55	19a. NAME OF RESPONSIBLE PERSON 19b. TELEPHONE NUMBER (Include area code)

Standard Form 298 (Rev. 8/98)

Prescribed by ANSI Std. Z39-18

Adobe Professional 7.0

MONOGRAPH APPROVAL

Name of Candidate: LCDR Kirk A. Sowers

Monograph Title: Army-Navy Integration and the Pivot to the West: A New Joint Concept

Approved by:

_____, Monograph Director

Mark T. Calhoun, Ph.D.

_____, Seminar Leader

Charles M. Evans, COL

_____, Director, School of Advanced Military Studies

Henry A. Arnold III, COL, IN

Accepted this 22nd day of May 2014 by:

_____, Director, Graduate Degree Programs

Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author, and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other government agency. (References to this study should include the foregoing statement.)

ABSTRACT

ARMY-NAVY INTEGRATION AND THE PIVOT TO THE WEST: A NEW JOINT CONCEPT by LCDR Kirk A. Sowers, United States Navy, 55 pages.

In a period of budget and personnel reductions, the U.S. military's separate services often develop new doctrinal concepts in an effort to secure a greater share of scarce defense dollars. It appears the Department of Defense is entering another such period. Currently, the Army and Navy lack the necessary joint operational concept required for further doctrinal development and training that support the President's strategic guidance for the pivot to the West. The analysis that follows focuses on land and sea force integration for future joint operations by demonstrating such operations' importance in historical case studies from the Civil War. The research presented here fits into one of two categories: military service requirements for operational concept development related to the 2010 NSS and 2012 DSG, and the mediating factors that either support or impede DOD concept development. This study suggests that the Army and Navy presently lack the necessary joint operational concept required to guide doctrinal development and training to support the strategic guidance in the 2010 NSS and 2012 DSG – a shortfall that the services' concept and doctrine developers should correct.

ACKNOWLEDGEMENTS

When I chose this topic, sequestration was making daily headlines and all U.S. military services were addressing the dramatic cuts to personnel, budgets, and equipment. I wanted to write on a topic that contributed to both the Army and Navy as they work to meet the new requirements of the 2012 DSG and the rebalance to the Pacific. This monograph is an attempt to fill that desire.

Without a supportive spouse, family, and others the past couple of years would not have been possible. To my wife, Doreen, you have sacrificed nights, weekends, and holidays for several years now. I can never repay that time back, but know that I love you and it is time to reclaim our future together. You are my best friend and your smile and laughter always lift my spirits. To my daughters, Lauren and Faith, thank you for all the laughs and many words of encouragement at the dinner table. To my daughter, Ainsley, thank you for all the time you willingly sacrificed during weekend visits together so I could study. To my youngest, Gracie, you were my shining star and a breath of fresh air with your many trips to the basement. To my father, Richard, you laid the early foundations of Army pride in a Sailor's heart. This is in part, written for you as well. To Dr. Calhoun, my monograph director, thank you. To COL Evans, my seminar leader, thank you for keeping me on track and providing guidance when needed. To my peers of Seminar 6, I have gained wisdom and insight from each one of you. I have the utmost respect for all of you; what you have contributed to the course, and the sacrifices you have made in Iraq and Afghanistan. Thank you for your insights, peer reviews, and thoughtful discussions. To my editor, Bonnie, I would not been able to do this without you. To Jeff Quail, thank you for your formatting contributions.

TABLE OF CONTENTS

ACRONYMS	vi
ILLUSTRATIONS	vii
INTRODUCTION	1
METHODOLOGY	4
Key Factors	5
Defining Key Factors.....	6
BACKGROUND.....	8
2010 National Security Strategy and the Pivot West.....	8
Military Transformation under the Shadow of the Pivot West.....	10
Culture as a Mediating Variable to Transformation	15
Joint Conceptual Doctrines in Support of the Pivot West.....	19
CASE STUDIES	25
Joint Operations in the Civil War	25
Western River Campaign	27
Fort Henry and Fort Donelson Operation	28
Analysis of the Fort Henry and Fort Donelson Operation	31
The Battle of Vicksburg.....	32
Analysis of the Vicksburg Campaign	37
East Coast Campaign	38
Battle of Fort Fisher, Wilmington, North Carolina.....	39
Analysis of the Battle of Fort Fisher.....	44
ANALYSIS AND FINDINGS	46
CONCLUSION	51
Conclusion	51
Recommendations.....	53
BIBLIOGRAPHY	55

ACRONYMS

A2/AD	Anti-Access/Aerial Denial
ACW	American Civil War
ADRP	Army Doctrine Reference Publication
ASAT	Antisatellite
ASB	Air Sea Battle
CCJO	Capstone Concept for Joint Operations: Joint Force 2020
CSA	Confederate States of America
DOD	Department of Defense
DOTMLPF	Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities
DSG	Defense Strategic Guidance
GMAC	Gain and Maintain Access Concept
ISR	Intelligence, Surveillance and Reconnaissance
JCS	Joint Chief of Staff
JEOC	Joint Entry Operational Concept
JFEO	Joint Forcible Entry Operations
JOAC	Joint Operational Access Concept
JP	Joint Publication
NOC 10	Naval Operational Concept 2010
NSS	National Security Strategy
SOCOM	Special Operations Command
U.S.	United States
USA	United States Army
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy

ILLUSTRATIONS

Figure 1. Strategic Concept Relationship Diagram	20
--	----

INTRODUCTION

It is vital to success in the war that the Army and the Navy so coordinate their actions as to produce the most effective mutual support. To accomplish this it is essential that both services have a common, definite understanding of their respective functions in national defense and the approved methods for attaining coordination in operations.

—D. F. Davis, Secretary of War, Joint Action of the Army and the Navy, 1927

In a period of budget and personnel reductions, the U.S. military's separate services often develop new doctrinal concepts in an effort to secure a greater share of scarce defense dollars. It appears the Department of Defense (DOD) is entering another such period.¹ Currently, the Army and Navy lack the necessary joint operational concept required for further doctrinal development and training that support the President's strategic guidance for the pivot to the West. This conceptual shortfall poses significant risk to joint interoperability, doctrine development, and mission accomplishment, particularly between the U.S. Army and U.S. Navy – capabilities that America has historically counted on to achieve mission success. The Army and Navy should readdress this joint concept shortfall if America hopes to retain its longstanding critical capability of effective Army-Navy joint interoperability. These services must develop a joint operational concept that supports the 2010 *National Security Strategy* (NSS) and the 2012 *Defense Strategic Guidance* (DSG).

This study demonstrates the need for a specific Army-Navy operational concept to enable the DOD to maintain a well-trained and integrated joint force capability to support the new

¹Dennis A. Thornton, *Army Transformation: Ill-Advised from a Joint Perspective?* (Washington, DC: 2001), 3-7; Andrew Krepinevich, "The Army and Land Warfare: Transforming the Legions," *Joint Forces Quarterly* (Autumn 2002): 76-82; Andrew Krepinevich, *Joint Concept Development and Experimentation* (Washington, DC: Center for Strategic and Budgetary Assessments, 2011), 1-4; Andrew Krepinevich, Simon Chin, and Todd Harrison, *Strategy in Austerity* (Washington, DC: 2012), 1-17; Douglas A. Macgregor, *Transformation under Fire: Revolutionizing How America Fights* (Westport, CT: Praeger Publishers, 2003), chap. 2; Jack D. Kem, "Military Transformation: Ends, Ways, and Means," *Air & Space Power Journal* (Fall 2006): 1-4; Thomas G. Mahnken and James R. FitzSimonds, "Tread-Heads or Technophiles? Army Officer Attitudes toward Transformation," *Parameters* (Summer 2004): 57-62; Lynn E. Davis and Jeremy Shapiro, eds., *The U.S. Army and the New National Security Strategy* (Arlington, VA: RAND, 2003), 129-161; Thomas Donnelly and Frederick W. Kagan, *Ground Truth: The Future of U.S. Land Power* (Washington, DC: AEI Press, 2008), chap. 1, 2, 4.

strategic guidance described in the 2010 NSS. It also illustrates how an Army-Navy joint concept would provide support as a subordinate concept to other strategic models currently under development within the *Capstone Concept for Joint Operations* (CCJO) family. The analysis that follows focuses on land and sea force integration and training for possible future joint operations by demonstrating such operations' importance in historical case studies from the Civil War.²

The significance of this study centers on the necessity for a combined Army-Navy operational concept based on requirements listed in the 2012 DSG, the CCJO, and the *Joint Operational Access Concept* (JOAC). This study showcases the importance these subordinate concepts play in the development of future strategic and operational planning considerations, and the role these concepts fulfill in the influence and development of future doctrine, which effects future training, force development, and budgeting. The study also shows how military transformation, culture, leadership, and cooperation could affect operations and concept development in an austere interwar environment, if not managed or addressed correctly. The results indicate that an Army-Navy operational concept is necessary for the underpinnings for force development guidance and emerging doctrine concepts. The outcomes of this study can further identify DOD and military service shortfalls as they relate to joint operations and interoperability concepts, in turn acting as a springboard for the concept development that emphasizes Army-Navy interoperability as part of the pivot to the West.³

For the purpose of this paper, the current Iraq and Afghanistan post-war drawdown represents an *interwar period* based on the assumption the United States will engage in another

²Donnelly and Kagan, chap. 5; Krepinevich, *Joint Concept Development and Experimentation*, 10-11; Chairman, Joint Chief of Staff, (CJCSI 3010.02D: *Guidance for Development and Implementation of Joint Concepts* (Washington, DC: Government Printing Office, 2013), A-1.

³Chairman, pt. A; Paul K. Davis et al., *Developing Resource-Informed Strategic Assessments and Recommendations* (Arlington, VA: RAND, National Defense Research Institute, 2008), 111; Mahnken and FitzSimonds, "Tread-Heads or Technophiles? Army Officer Attitudes toward Transformation," 58-62.

conflict at some point in the future. During this period, the ability of DOD to implement new strategic guidance affects the services' readiness and effectiveness. The 2010 NSS and the 2012 DSG guidance requires the services, particularly the Army and Navy, to compete for limited resources rather than seeking means to integrate capabilities to face future threats.

A rich history exists of Army and Navy cooperative operational engagements and mutually supporting doctrine. Army-Navy joint effectiveness provides the operational commander an increased range of capabilities that no single service could provide. By combining corresponding capabilities during joint operations, services limit their operational shortfalls, provide additional levels of flexibility in the employment of subordinate forces, allow for the employment of subordinate forces asymmetrically, and provide a multidimensional threat to the enemy.⁴

The research presented here addresses several questions, each of which fits into one of two categories: military service requirements for operational concept development related to the 2010 NSS and 2012 DSG, and the mediating factors that either support or impede DOD concept development. This study suggests that the Army and Navy presently lack the necessary joint operational concept required to guide doctrinal development and training to support the strategic guidance in the 2010 NSS and 2012 DSG – a shortfall that the services' concept and doctrine developers must correct. Further, no effort appears to be under way to develop a joint operational concept; rather, the services' intellectual activity seems concentrated on service-specific

⁴Chairman, Joint Chief of Staff, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: 2012), 4-8; Barry P. Messina, *Development of U.S. Joint and Amphibious Doctrine, 1898-1945* (Alexandria, VA, 1994), CRM 94-103; Milan N. Vego, "Major Joint/Combined Operations," *Joint Forces Quarterly* 48, (1st Quarter 2008): 113; Thomas Joseph Murphy, *Army-Navy Integration* (Fort Leavenworth, KS: Center for Army Lessons Learned, 2010), Introduction, 3-20; Craig L. Symonds, ed. *Union Combined Operations in the Civil War* (New York: Fordham University Press, 2012), 1-9; Rowena Reed, *Combined Operations in the Civil War* (Annapolis: United States Naval Institute, 1978), Introduction; Edward H. Wiser, "Union Combined Operations in the Civil War: Lessons Learned, Lessons Forgotten," in *Union Combined Operations in the Civil War*, ed. Craig L. Symonds (New York: Fordham University Press, 2010), 135-151.

capabilities rather than joint cooperation. This leaves a void in concept development and doctrine that could have negative effects in future operations, particularly given the likely requirements of the new national strategy described in the 2010 NSS and supporting policy documents. While abundant histories of successful joint Army-Navy operations exist, they only serve to highlight the contrast with current inter-service competition.

The following analysis does not offer recommendations for a specific joint doctrine or propose a joint operating concept based on that doctrine; neither does it address various future service constructs that might arise as strategic guidance and joint doctrine continues to evolve. Rather, it illustrates the absence of such a concept, and emphasizes the need to fill this gap in current joint doctrine.

METHODOLOGY

Historical case analysis will establish the traditional requirement for land-sea force integration, not simply for amphibious operations, but the full range of integrated capabilities these two branches have routinely cooperated to achieve. Three case studies from the American Civil War (ACW) illustrate the value of close Army-Navy coordination: the Capture of Fort Henry and Fort Donelson, the Battle of Vicksburg, and the Second Battle for Fort Fisher. In contrast, analysis of the First Battle for Fort Fisher will demonstrate how a lack of cooperative engagement and collaboration between services can limit the effectiveness of joint operations. This illustrates the risk of continuing on the present course of inter-service competition rather than cooperation. Using factors of operational necessity, leadership, cooperation, and synergy as the evaluation criteria, analysis of the case studies highlights both benefits and inhibitors to the success of joint Army-Navy operations.

Selected for their historical significance during the ACW, the case studies show how the success of these three operations benefited from Army-Navy cooperation. The Capture of Fort

Henry and Fort Donelson were among the first joint operations of the war.⁵ By developing a good working relationship early in the war, Major General Ulysses S. Grant and Captain Andrew H. Foote laid the foundation for future Army-Navy cooperation and collaboration. The Battle of Vicksburg provides numerous accounts of cooperation between operational leaders. For almost a year, the Army and Navy relied on each other for protection and additional war fighting functions necessary to be successful against a heavily defended fortification. When compared to the Fort Henry and Fort Donelson operations, the Battle of Fort Fisher provides an example of how complex joint operations had become in only a few years. In addition, the Fort Fisher operation, comprised of two separate battles, represents contrasting outcomes based on evaluation criteria. The results of the case study analysis illustrate the historical criticality of effective land-sea coordination, highlighting the necessity for the U.S. military to retain this capability as it prepares to face anticipated future threats.

Key Factors

Joint operations were an important element in the outcome of the ACW. The Capture of Fort Henry and Fort Donelson, the Vicksburg Campaign, and the Fort Fisher Campaign, when analyzed through the lens of operational necessity, leadership, cooperation, and synergy, illustrate the key role of effective Army-Navy cooperation. The findings illustrate the historical criticality of effective joint Army-Navy operations. Joint Army-Navy cooperation remains an operational necessity as U.S. military forces conduct operations in support of national strategy. In examples of successful joint operations, one can see the essential roles played by effective leadership and

⁵Before moving forward, a word must be said about the term “joint” as it appears within “joint operations.” ACW-era sources refer to Army-Navy operations as combined operations. In modern doctrine, joint refers to activities, operations, or organizations in which elements of two or more military departments contribute. For clarity and consistency, this paper relies on the modern terminology, using “joint” where, during the ACW, writers could more likely have used the term “combined.” [Since “lexicon” refers to a dictionary or vocabulary, not a single word, I deleted that term. Also, you should not capitalize “Military Departments” even if it appears that was in a *JP*, which are notorious for overcapitalization.]

inter-service cooperation. In particular, the following analysis highlights the synergistic effects achieved through unity of effort by joint operations, illustrating the strategic importance of the Army-Navy relationship.

The four key factors selected for evaluation criteria offer a means to conduct an objective and critical analysis. The case studies focus on the most relevant factors illustrating the value of Army-Navy inter-service cooperation, and acting as mediating variables in the outcome of the operation. Joint concepts improve the Joint Force within the context of strategic guidance.⁶ Based on this line of logic, operational necessity highlights the need for an Army-Navy joint operation based on strategic guidance. This research uses leadership and cooperation because they are key factors that can dramatically affect the outcome of a joint operation. In peacetime, both leadership and cooperation influence concept development and transformation efforts as well. Lastly, synergy evaluates the effects of joint operations on the strategic outcome of an operation or campaign, thereby demonstrating the need for a joint Army-Navy concept that predicates joint future doctrine and training.

Defining Key Factors

Joint Publication 3-0, Joint Operations (JP 3-0), is the keystone publication for conducting joint operations, and provides the framework within which U.S. forces fight as a joint team across a range of military operations. JP 3-0 defines strategy as, “A prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives.”⁷ Additionally, joint doctrine defines operational necessity as “A mission associated with war or peacetime operations in which the

⁶Chairman, CJCSI 3010.02D, Guidance for Development and Implementation of Joint Concepts, A-1.

⁷U.S. Joint Forces Command, *Joint Publication 3-0, Joint Operations* (Norfolk, VA: U.S. Joint Forces Command, 2011), xi.

consequences of an action justify the risk . . .”⁸ Within the context of this paper, the term “operational necessity” refers to a mission, operation, or campaign that is necessary to achieve a theater or operational level objective as part of a broader strategic outcome.

Two key factors in any successful operation are leadership and cooperation. Leadership can be the lynchpin between success and failure. It is even more essential when conducting joint operations because of the innate complexity that involves combining forces from multiple military services in time, space, and purpose to meet the requirements of an operational level objective. *Army Doctrine Reference Publication (ADRP) 6-22, Army Leadership*, defines leadership as, “the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization.”⁹ *Cooperation* is a situation in which people work together to do something.¹⁰ Although trite in its definition, cooperation is about relationships and how well people work together for the success of the larger objective. Although people are important, the relationships matter most. When cooperation is in short demand, it is because organizations have different stakes in the actions required, organizations lack necessary abilities, or there are different priorities or different assessments of the situation.¹¹

One can find a useful description of *synergy* used in a military context in *Joint Publication 1-0, Doctrine for the Armed Forces of the United States (JP 1-0)*. Simply defined, synergy is the subsequent outcome of simultaneous combined actions from two or more service

⁸U.S. Joint Forces Command, Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Norfolk, VA: U.S. Joint Forces Command, 2010), 196.

⁹Department of the Army Headquarters, *Army Doctrine Reference Publication (ADRP) 6-22, Army Leadership* (Washington, DC: *Department of the Army*, 2012), 1-1, 2-3, 2-5.

¹⁰Merriam-Webster, “Dictionary,” Merriam-Webster, Incorporated <http://www.merriam-webster.com/dictionary/cooperation> (accessed April 10 2014)

¹¹Michael Fullan, *Leading in a Culture of Change* (San Francisco: Jossey-Bass, 2001), 51; John P. Kotter, *Power and Influence: Beyond Formal Authority* (New York: The Free Press, 1985), 64.

components that maximizes their effectiveness, while minimizing their specific service shortfalls.¹²

BACKGROUND

2010 National Security Strategy and the Pivot West

The President’s 2010 NSS described the projected security environment and the complex array of challenges expected to confront the DOD in the first half of the twenty-first century. Two years later, the President and the Secretary of Defense updated the DOD DSG with a new document entitled *Sustaining U.S. Global Leadership: Priorities for the 21st Century Defense*. This new document provides the strategic guidance that directs military service professionals under austere conditions in the development of the future Joint Force – a joint force concept known as *Joint Task Force 2020*. The precepts for force development programs rest on several principles focused on maintaining a “broad portfolio of military capabilities, offering versatility across the range of missions.”¹³ These missions include counterterrorism and irregular warfare; the need to deter and defeat aggression by any potential enemy; the need to maintain a safe, secure, and effective nuclear deterrent program; and the necessity to defend the homeland and support civil authorities. In addition, these documents shifted the government’s focus from ten years of extended conflict in the Middle East to a new focal point in the Asia-Pacific region – a shift commonly referred to as the “pivot West.”¹⁴

¹²U.S. Joint Forces Command, Joint Publication 1, *Doctrine for the Armed Forces of the United States* (Norfolk, VA: U.S. Joint Forces Command, 2013), I-2.

¹³Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, (Washington, DC: Government Printint Office, 2012), 6.

¹⁴United States of America Office of the President, *National Security Strategy* (Washington DC: Government Printing Office, 2010), 1; Mark E. Manyin et al., *Pivot to the Pacific? The Obama Administration’s “Rebalancing” toward Asia* (Washington DC: Congressional Research Service, 2012), 1; Department of Defense, *DSG*, 6, 4-5, 2.

According to some analysts, the relationship between China and the United States will serve as the defining relationship affecting global strategy and economy in the first half of the twenty-first century. These analysts forecast that these two nations will work in an environment of both cooperation and competition over mutually desired and valued operational domains. These operational domains include the nuclear arena, maritime and space environments, and cyberspace. As globalization increases economic, maritime, and computer network integration, analysts predict an escalation in tensions between the United States and China. These tensions come from distrust, self-interest, sovereignty disputes, and the desire to minimize strategic vulnerabilities and economic disruptions based on interaction within these contested domains.¹⁵

To enable the United States to cope with these tensions in the coming decades, the Obama Administration seeks to broaden and strengthen the nation's role in the Asia-Pacific region. This expanded role, in theory, promotes the United States' strategic interests by increasing its influence over the development and enforcement of the international rules and norms throughout the region. Through this increased influence, analysts argue that the United States Government will possess the ability to ensure freedom of navigation throughout the global commons, stimulate the trust and cooperation between emerging global powers, and act as intermediary to prevent threats of coercion from growing military powers. The President's rebalance to the Pacific rests on the supposition that the center of gravity for U.S. foreign policy, national security, and economic interest resides within the Pan-Asia region. The President seeks

¹⁵David C. Gompert, *Sea Power and American Interests in the Western Pacific* (Santa Monica: RAND National Defense Research Institute, 2013), chap. 1, 3; David C. Gompert and Phillip S. Saunders, *The Paradox of Power: Sino-American Strategic Restraint in an Age of Vulnerability* (Washington, DC: National Defense University Press, 2011), xxi-xxvi; Office of the President, 3, 32, 42-44; DSG, 1-3; José Pedro Filipe de Oliveira Baptista, "Power Transitions and Conflict: Applying Power Transition Theory and Liberal-Institutionalist Theory to US-China Relations" (University Of Oslo, 2012), 56-57; Donnelly and Kagan, 27-28; United States Joint Forces Command, *The Joint Operating Environment*, (Suffolk, VA: Government Printing Office, 2010), pt. 2; Qiao Liang and Wang Xiangsui, *Unrestricted Warfare: China's Master Plan to Destroy America* (Panama City, Panama: Pan American Publishing Company, 1999), vii-xxii.

reverse the perception that the U.S. commitment to the region has waned with this updated strategic guidance, particularly in response to the growing economic importance of the region, and China's ever-increasing military capabilities and assertive claims over disputed territories.¹⁶

Although identified as a priority, this transition in strategic thought is taking place concurrently with the drawdowns in Iraq and Afghanistan. The DOD is already making the transition from a wartime environment to one of force reductions and budget cuts. This only complicates its efforts to provide military support to shifting strategic priorities.

Military Transformation under the Shadow of the Pivot West

Interwar periods always create challenges for military forces, leading to trepidation and uncertainty as organizations face the unknowns involved in the changing environment. When nations engage in active combat, inter-service rivalries tend to take a back seat to mission accomplishment, partly because increased military budgets reduce inter-service competition for monetary resources. Inter-service rivalries magnify as wartime conflicts end; post-war environments tend to cause military services to display characteristics of large bureaucratic organizations. Confusion arises as services attempt to meet the challenges of the current national defense environment, while simultaneously planning and preparing for an uncertain future against an uncertain enemy, masked behind the fog of shifting geo-political conditions. Challenges include questions regarding what future concepts, doctrines, and troop-training procedures military forces should develop to remain relevant within that uncertain future.¹⁷

¹⁶Manyin et al., 1-2; Shri Dilip Hiro, "The Sole Superpower in Decline: The Rise of a Multipolar World," *Military Review* (July-August, 2008): 143-144; National Intelligence Council, *Global Trends 2030: Alternative Worlds* (Washington, DC: 2012), 75-76, 98-101; Michael Gerson and Alison Lawler Russell, "American Grand Strategy and Seapower," *CNA Analysis and Solutions: American Grand Strategy and Seapower* (Washington, DC: CNA Analysis and Solutions, 2011), 17-18; Command, 39-42, 45; Gompert, chap. 1, 3; Davis et al., 26.

¹⁷Davis and Shapiro, eds., 165; Harold R. Winton and David R. Mets, eds., *The Challenge of Change: Military Institutions and New Realities, 1918-1941* (Lincoln: University of Nebraska, 2000), xi;

The natural tendency is for the Army and other services to isolate themselves and begin the great task of force reductions, funding redistribution, and force equipment changes required for the future operational environment. These changes, sometimes referred to as military transformation, military innovation, or military reengineering, all provide a pathway for change; particularly military change during an interwar period in which organizations must navigate successfully if they intend to survive.¹⁸

Military analysts, Harold Winton and David Mets, suggest that three major factors affect military organizations during transformation: how well these organizations navigate the complexity and uncertainty of the future; how well they manage external influences (i.e. political and social structures); and in what manner the characteristics and values of the institution and its leaders determine its cultural traits. To manage these transformational realities, one can analyze patterns in success and failure to determine the optimal path that will enable the organization to move forward with acceptable risk.¹⁹

When discussing organizational failure, Dietrich Dörner said, “Failure does not strike like a bolt from the blue; it develops gradually according to its own logic.”²⁰ Winton and Mets argue that unpreparedness of the armed forces at the beginning of a conflict is a repetitive theme in

Williamson Murray, “Institute for Defense Analyses, Two Lectures,” in *Military Innovation* (Alexandria, VA: Institute For Defense Analyses, 2002), 1-13; Williamson Murray and Allan R. Millett, *Military Innovation in the Interwar Period*, 21st ed. (Cambridge: Cambridge University Press, 1996), 2, 370; Kotter, 3, 32; Liang and Xiangsui, 67-68.

¹⁸Edward L. Ford, *An Analysis of U.S. Air Force & Army Transformations* (Carlisle, PA: U.S. Army War College, 2007), 1-7; Randolph P. Miller, *U.S. Military Transformation and Experimentation Historical Perspectives, Prospects, and Prescription* (Maxwell Air Force Base, Alabama: University of Pittsburgh, 2002), 13; Robert R. Tomes, “Military Innovation and the Origins of the American Revolution in Military Affairs” (Dissertation, University of Maryland, 2004), 3; Brett Steele, *Military Reengineering between the World Wars* (Santa Monica, CA: RAND National Defense Research Institute, 2005), vii, 4; Collins S. Gray, *Another Bloody Century* (London: Phoenix, 2005), pt. 1; Brian McAllister Linn, *The Echo of Battle: The Army’s Way of War* (Cambridge: Harvard University Press, 2007), 233-243.

¹⁹Winton and Mets, eds., xii.

²⁰Dietrich Dörner, *The Logic of Failure* (New York: Metropolitan Books, 1996), 10.

American military history. Others contend that it is not the small changes that happen year-to-year, but the gradual accumulation of changes over time that have the biggest negative effect on military organizations in transition.²¹

Professors Eliot Cohen and John Gooch have argued that militaries tend to exhibit common behaviors related to organizational failure during transformation periods. Typically, they are failures that stem from inabilities to learn from previous mistakes, anticipate the future, and adapt correctly to the changing circumstances. Military historian Williamson Murray identified four additional factors that can lead to weakness in transformation efforts. First, military leaders often underestimate the combat capabilities of potential adversaries or overestimate their own capabilities against these future threats. Second, forced to accept a “good enough” solution, trainers and planners fail to seek the very best solution for operational and tactical situations. Third, planners sometimes over-use or misuse historical examples to justify current doctrine. Lastly, rigid institutional culture often impedes the transformation process by constraining critical and creative thinking. This often leads organizations to adhere to previous biases and overlook alternative options and concepts. In short, history has an overabundance of military misfortunes that support these various elements of failure. The French military between the World Wars serves as a useful example.²²

The French Army’s catastrophic failure in the early days of World War II illustrates the effect of four distinct types of failure that plague military institutions during times of transformation. The French misapplied the lessons of World War I as seen in the political and military leaders’ development of *methodical battle* doctrine. This doctrine focused on tightly

²¹Winton and Mets, eds., xvii; Linn, 233-243; Carl H. Builder, *The Mask of War: American Military Styles in Strategy and Analysis* (Baltimore: The John Hopkins University Press, 1989), 185-193; Gerson and Russell, 3-4.

²²Dörner, 10; Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: The Free Press, 1990), 26; Murray, 2, 19-20.

controlled, centralized operations, and emphasized firepower – particularly artillery – and a defensive posture when all signs indicated a shift in the future toward offensive operations that emphasized maneuver rather than firepower. Although masters of technical innovation at the time, the French did not grasp the potential of motorization, mechanization, and maneuver doctrine, thus demonstrating a failure of adaptation to changing capabilities. Instead of capitalizing on the technical advancements, the French chose to reaffirm old doctrine, thereby neglecting the newfound armor capabilities that brought rapid movement and destruction to the battlefield.²³

Cultural rigidity and French hostility toward doctrinal experimentation played a large role in France's failure to accept new capabilities brought forth by technology. Failing to anticipate and accept the idea of maneuver as the main effort, traditionalists within the General Headquarters assigned maneuver elements to a supporting role within infantry divisions. Thus, the French negated the combat power brought forth by new technology – although they were on the leading edge of the technical advancement before World War II. In contrast to identifying common transformation failures, there is merit to analyzing factors that lead to transformation success as well.²⁴

Successful military transformation requires great effort, effective leaders, and a willingness to accept that the current organizational culture's reality and systems might prove ineffective against future threats. The military may require a paradigm shift in how it thinks about the future context of war, apply doctrine, and apply developed systems in combat. Historical

²³Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford: Oxford Press, 2001), 406; Steele, 23-28; Eugenia C. Kiesling, "Resting Uncomfortably on Its Laurels: The Army of Interwar France," in *The Challenge of Change*, ed. Harold R. Winton and David R. Mets (Lincoln: University of Nebraska Press, 2000), 24; Murray and Millett, 318-325.

²⁴Murray and Millett, 13-15, 29-34; Winton and Mets, eds., 1-25; Steele, 23-28; Peter. ed Paret, *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton, New Jersey: Princeton University Press, 1986), 598-604.

evidence suggests there are four major areas that affect successful transformation. The first is the context in which this transformation takes place. In particular, instead of looking at the last combat experience, military services should look at the future strategic environment to identify potential threats. In time, the services will move to develop strategies and capabilities that will be necessary within that particular context, followed by rebuilding their new operational and tactical paradigms to operate within the future environment. The second area is the institutional framework that will be vital to successful change initiatives. The third area highlights the point that military leadership matters. The services need influential members within the ranks that place innovation and transformation as top priorities, and they must be able to push those priorities through bureaucratic institutional strongholds. The fourth, and most important, is whether military culture acts as an enabler to transformation or a hindrance during the change process. For example, in contrast to the French, the German Army set the example for what a successful transformation resembles at the tactical level.²⁵

Breaking from the mentality of the past, the German Army transformation provided a foundational study for a military organization adapting to current restraints while preparing an Army for the future. Its leaders successfully innovated in the areas of mechanization, maneuver doctrine, and officer education during the interwar period. Organizational cooperation, early changes to doctrine, technical advancements, and strong leadership all proved vital to the German success during the early phase of World War II.²⁶

²⁵Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (New York: Anchor Books, 1966), 53-67, 79-83; Tomes, 358; Winton and Mets, eds., xi-xiv; Davis et al., 9; Murray and Millett, 1-5, 301, 304; Davis and Shapiro, eds., 147; Murray and Millett, 305.

²⁶Dennis E. Showalter, “Military Innovation and the Whig Perspective of History,” in *The Challenge of Change: Military Institutions and New Realities, 1918-1941*, ed. Harold R. Winton and David R. Mets (Lincoln: University of Nebraska Press, 2000), 227-230. To highlight one point; the Germans were not perfect in their transformational efforts. One area they failed to effectively change was in the ability to resupply their forces over long distances. Their ineffectiveness at developing capabilities in operational

General Hans von Seeckt understood the challenges of strategic context brought about by the prohibitions from the Treaty of Versailles. In response, Seeckt changed the German Army's institutional framework. He created a climate that allowed leaders to identify and share their weaknesses and failures in an effort to improve the effectiveness and capabilities of the German Army. He also retained only the finest leaders to populate the Army Officer Corps, which ensured these officers received the best possible education. Because of Seeckt's efforts, the German Army developed a culture that was detailed, skeptical, and analytical with cognitive models that superseded inflexible conformity. The development of this type of culture was vital to the German success, and acted as an enabler to tactical level transformation instead of an impediment to change.²⁷

Culture as a Mediating Variable to Transformation

A service's organizational culture and attitude during interwar periods have a significant effect on that service's initial success or failure in the next conflict. Military historian Dennis Showalter suggests that interwar periods are chaotic models in which innovation and technology among services take a backseat to the creation of positive synergy. He highlights that service cultures and the social political systems that support those cultures necessitate a receptive organizational climate. These cultures require an environment that looks past service parochialisms in order to develop new concepts and ideas.²⁸

reach would have drastic consequences during the war as the Germans attacked the Russians on the eastern front.

²⁷Paret, 547-560; Robert Michael Citino, *The German Way of War: From the Thirty Years' War to the Third Reich* (Lawrence, KS: University Press Kansas, 2005), 253-256; James C. Corum, *The Roots of Blitzkrieg: Hans Von Seeckt and German Military Reform* (Lawrence: University Press of Kansas, 1992), 25-50; Winton and Mets, eds., 39-44, 48-51, 64-66; Murray and Millett, 34-48; Murray, 16-17; Martin Van Creveld, *The Changing Face of War* (New York: Ballantine Books, 2006), 98-100.

²⁸Colin P. Silverthorne, *Organizational Psychology in Cross-Cultural Perspectives* (New York: New York University Press, 2005), 7-8, 25-27; Tomes, 10; Murray, 19-22; Murray and Millett, 313, 323-325; Roger Thompson, *Lessons Not Learned: The U.S. Navy's Status Quo Culture* (Annapolis: Naval Institute Press, 2007), 177-184; Ford, 4-5; Showalter, 229-233.

Edgar Schein defines a group's culture as:

A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.²⁹

Edward Dorn and Howard Graves define military culture as:

The essence [of] how things are done in a military organization. Military culture is an amalgam of values, customs, traditions, and their philosophical underpinnings that, over time, has created a shared institutional ethos/from military culture springs a common framework for those in uniform and common expectations regarding standards of behavior, discipline, teamwork, loyalty, selfless duty, and the customs that support those elements.³⁰

Along these lines of thought, one can consider the Department of Defense as a corporate culture of the military, in which each service component constitutes a different subculture within the broader corporate culture.³¹ To expound further, Mary Jo Hatch explains subcultures as “a subset of an organization’s members that identify themselves as a distinct group within the organization and routinely take action on the basis of their unique collective understandings.”³² Additionally, subcultures react with both the corporate culture and other subcultures, contending within the organizational structure, both vertically and horizontally. An organizational metaphor known as *silo* explains the characteristic norms, beliefs, and routines that develop within a particular subculture in such a way that makes coordination and collaboration between subcultures problematic.³³

²⁹Edgar H. Schein, *Organizational Culture and Leadership*, 4th ed. (San Francisco: Jossey-Bass, 2010), 18.

³⁰Edwin Dorn and Howard D. Graves, *American Military Culture in the Twenty-First Century* (Washington, DC: Center for Strategic and International Studies, 2000), 20.

³¹Linn, 233-237; Showalter, 231.

³²Mary Jo Hatch and Ann L. Cunliffe, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, Second ed. (Oxford: Oxford University Press, 2006), 176-178.

³³Joyce DiMarco, “Service Culture Effects on Joint Operations: The Masks of War Unveiled” (US Army School for Advanced Military Studies, 2004), 44-50; Builder, 17-43.

Similarly, John P. Kotter argues there are challenges within these intercultural interactions that directly lead to “power struggles, parochial politics, and bureaucratic infighting.”³⁴ He suggests these challenges today are not based on a staff’s inability to collaborate and cooperate on personal or small group levels, but their struggle result from an organization’s inability to understand the social milieu or dynamic complexity that exist within socially complex organizational environments. Within these complex environments, there are two concepts that Kotter brings to light: the concepts of diversity and interdependence. He defines diversity as the “differences among people with respect to goals, values, stakes, assumptions, and perceptions;” in addition, “interdependence refers to a state in which two or more parties have power over each other because they are, to some degree, dependent on each other.”³⁵

Kotter suggests that the amount of diversity and interdependence within an organization is directly associated to the potential for conflict, which directly relates to potential power struggles, parochialism, and infighting. These concepts explain why separate military services, although connected within the corporate culture of the DOD, maintain separate subcultures, each with its own language, beliefs, and values. Kotter adds that the more sophisticated the technology, the more diverse the service force. Higher levels of diversity and interdependence within an organization only magnify the potential for conflict and power struggles based on limited resources, i.e., funding.³⁶

Schein supports this claim by explaining that groups, no matter what their size, must deal with two problems: survival, growth, and adaptation in their environment; and second, internal integration that permits daily functioning, and the ability to adapt and learn. He argues that

³⁴Kotter, 3.

³⁵Ibid., 17.

³⁶Kotter, 11-20, 31-35; Silverthorne, 193; Eric-Hans Kramer, *Organizing Doubt: Grounded Theory, Army Units and Dealing with Dynamic Complexity*, ed. Stewart R. Clegg and Ralph Stables (Slovenia: Liber and Copenhagen Business School Press, 2007), 12-13.

employees' organizational behavior teaches new members, thereby making organizational culture a mechanism for social control. As a result, members are manipulated into perceiving, thinking, and feeling certain ways. This silo concept provides a valid explanation for the inter-service parochialism that continues to exist between military services, which only heighten in postwar situations when resources become limited and services must vie for their pieces of the fiscal pie. Within the context of culture, there are other mediating factors that can either support transformation or act as an impediment to the change process – the biggest being leadership.³⁷

As important as culture is to the transformation process, how organizational leaders guide and nurture that culture plays even a larger part in the success of the transformation process. It is important for leaders to understand their organizational culture because culture and leadership “are two sides of the same coin.”³⁸ Leaders start by building the desired culture when they create the groups or organization. Eventually, the culture will define the criteria for leadership, and thus determine who will or will not become a leader. To prevent a culture from becoming dysfunctional, thereby leading to dysfunctional leadership, it is important for leadership to maintain a constant pulse on the organizational culture and the direction it is heading. Leadership can manage and sometimes change the culture if necessary, in turn weathering the changing environments that will help mission accomplishment.³⁹

In contrast, when organizational culture is not managed successfully, cultures become dysfunctional. The organizational culture can inhibit change or, worse, fail to survive the changing conditions of a turbulent transformation period. Current research addresses the negative potential of organizational performance when infighting and bureaucratic bullying go unchecked.

³⁷Schein, 293-294; Hatch and Cunliffe, 176.

³⁸Schein, 3.

³⁹Geert Hofstede and Gert Jan Hofstede, *Cultures and Organizations: Software of the Mind* (New York: McGraw-Hill, 2005), 309; Schein, 22.

Chances of failure increase when organizational change initiatives fail to follow proven historical models.⁴⁰

To meet future operating environment requirements, the military needs to develop the ability to transform from the current force structure into the new joint force, embracing leaders who will manage the cultural intricacies of that transformation. To guide military leaders through this transition, there are several important documents direct future transformation and force constructs, beginning with the 2012 DSG.

Joint Conceptual Doctrines in Support of the Pivot West

One way of understanding NSS and the DSG concepts is to think of it as a story. The plot of this story is the pivot to the West. The rising action describes the necessity for the nation to focus on the Asia-Pacific region. The *Capstone Concept for Joint Operations: Joint Force 2020 (CCJO)* and *Joint Operational Access Concept (JOAC)* represent the climax to the story. The military service concepts used in development and building force capabilities of the future are the falling action. Force allocation and basing are the story's resolution. Every good story needs a conflict to resolve. The Navy and Air Force have presented its AirSea Battle concept, describing how they would fight a war in the Pacific. The Army and Navy should present their own concept.

⁴⁰Syed Kamran Ali Shah et al., “Influential Role of Culture on Leadership Effectiveness and Organizational Performance,” *Information Management and Business Review* 3, no. 2 (2011): 127-132; Ronnie Kurchner-Hawkins and Rima Miller, “Organizational Politics: Building Positive Political Strategies in Turbulent Times,” *Handbook of Organizational Politics*, ed. Eran Vigoda-Gadot and Amos Drory (Cheltenham, UK: Edward Elgar, 2006), 328-351; John P. Meriac and Peter D. Villanova, “Agreeable and Extraversion as Moderators of the Political Influence Compatibility - Work Outcomes Relationship,” *ibid.*, 16-27; Eran Vigoda-Gadot and Yinnon Dryzin-Amit, “Organizational Politics, Leadership and Performance in Modern Public Worksites: A Theoretical Framework,” *ibid.*, 3-15; John L. Whitlock, “Strategic Thinking, Planning, and Doing: How to Reunite Leadership and Management to Connect Vision with Action,” in *The Power of Public Service* (Washington, DC: Center for Excellence in Municipal Management, 2003), 4-7; John P. Kotter, “Ten Observations,” *Executive Excellence* August, (1999): 15-16; John P. Kotter, “Leading Change: Why Transformation Efforts Fail,” *Harvard Business Review* (January 2001); John P. Kotter and Leonard A. Schlesinger, “Choosing Strategies for Change,” *ibid.* (July-August 2008).

A strategic and operational debate from evaluating AirSea and SeaLand concepts would make rising action and the climax much richer, valuable, while reducing risk.

A brief explanation of service doctrines is necessary to understand how these concepts fit holistically into the DSG. Figure 1 provides a graphical view of concept alignment.⁴¹

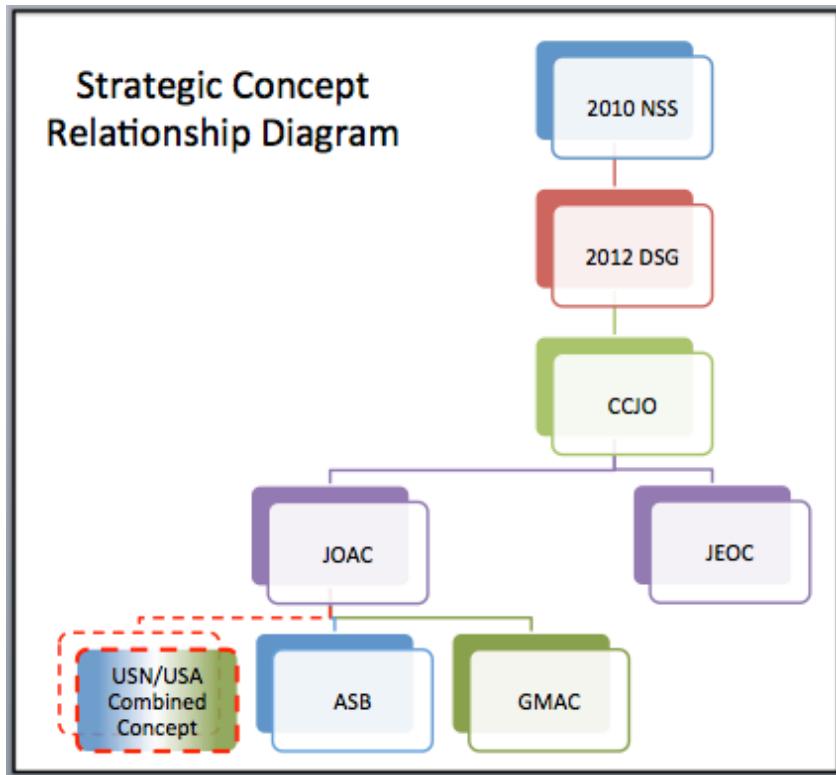


Figure 1. Strategic Concept Relationship Diagram

Source: Air-Sea Battle Office, Air-Sea Battle: Service Collaboration to Address Anti-Access and Area Denial Challenges 2013, Figure 2.

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense is the newest defense strategic guidance published by the President and DOD. It describes the future security environment, and how the DOD will reshape its priorities to structure and realign the Armed

⁴¹H. Porter Abbott, *The Cambridge Introduction to Narrative*, 2nd ed. (New York: Cambridge University Press, 2008), 19, 22-24, 28-29, 40-46.

Services to meet the future military objectives. The policy guidance directs decision-making in the creation, force shaping, and construct of the Joint Force 2020. This future joint force is structured as a smaller, but more responsive and agile land force that leverages quick mobilization and increased capabilities in intelligence, surveillance and reconnaissance (ISR), cyberspace capabilities, and unmanned systems.⁴²

The Joint Chiefs of Staff (JCS) applied the ideas of the Joint Force 2020 to create the *Capstone Concept for Joint Operations* (CCJO). It communicates a vision of future force operations, expanding upon direction by the Secretary of Defense. One key idea within the CCJO is the concept of *Globally Integrated Operations*. It describes how the Joint Force 2020 will prepare for the future operational environment.

Globally integrated operations consist of eight key elements. *Cross-domain synergy* is the most important. Cross-domain synergy calls for merging capabilities and emphasizes merging doctrine as well.⁴³ The cross-domain synergy concept is important because it is the central idea behind the *Joint Operational Access Concept* (JOAC), the JCS model for how the U.S. armed forces will defeat anti-access/area denial efforts (A2/AD) by a future adversary.⁴⁴

⁴²DSG, 1-3; Catherine Dale and Pat Towell, *In Brief: Assessing the January 2012 Defense Strategic Guidance (DSG)* (Washington, DC: 2013), 1-5; Anthony H. Cordesman, *The New US Defense Strategy and the Priorities and Changes in the Fy2013 Budget* (Washington, DC: 2012); Tanguy Struye de Swielande, “The Reassertion of the United States in the Asia- Pacific Region,” *Parameters* (Spring 2012): 75-78.

⁴³Department of Defense, “Capstone Concept for Joint Operations: Joint Force 2020,” (Washington, DC: Government Printing Office, 2012), 1-8; Dennis Steele, “Setting the Azimuth for Joint Force 2020: Globally Integrated Operations and Mission Command,” *Army* (November 2012): 27-29; Jim Garamone, “Dempsey Releases Concept to Build Joint Force 2020”, U.S. Department of Defense <http://www.defense.gov/news/newsarticle.aspx?id=118043> (accessed 5 March 2014).

⁴⁴Anti-access (A2) refers to those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area. Area- denial (AD) refers to those actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area.

Published in September 2012, the JOAC clarifies how the joint force gains operational access against an armed adversary under the complex and dynamic conditions of an A2/AD environment. The concept emphasizes the need for the joint force to gain operational access in order to project military force while maintaining the appropriate maneuver space. Operational access is the U.S. military's answer to the requirement for unhindered national use of the global commons to include waters, airspace, space, and cyberspace. The joint force leverages cross-domain synergy as the key component of integration and transformation to gain superiority in an area of operations. Cross-domain synergy requires fusion of capabilities at all echelons. As a cornerstone reference concept, the JOAC lays the foundation for follow-on concept development, examination, and research. These newly developed concepts create the intellectual framework that guides doctrine, organization, training, material, leadership, personnel, and facilities (DOTMLPF) solutions for the future joint force. This conceptual framework guided the creation of several other military service and force specific concepts.⁴⁵

The Navy and Air Force have influenced initial framework development with the *Air Sea Battle* (ASB) concept. Written to ensure freedom of action within the global commons, the concept lays the cognitive foundations for the development of technological systems and doctrine that will aid in maintaining an operational advantage in an A2/AD environment. It supports the JOAC by identifying more specific means requirements to maintain freedom of action within contested areas. In 2010, the USMC, USN, and the United States Coast Guard combined efforts to write the *Naval Operational Concept 2010* (NOC10), which describes how the U.S. employs

⁴⁵Chairman, Joint Chief of Staff, *The Joint Operational Access Concept (JOAC)* (Washington, DC: Department of Defense, 2012), 1-17; Winton and Mets, eds., xii; Swielande, "The Reassertion of the United States in the Asia- Pacific Region," 75-87; Paul A. Olsen, *Operation Corporate: Operational Art and Implications for the Joint Operational Access Concept* (Fort Leavenworth, 2012), 33-45; Nathan Freier, "Challenges to American Access: The Joint Operational Access Concept and Future Military Risk", Center for Strategic and International Studies <http://csis.org/publication/challenges-american-access-joint-operational-access-concept-and-future-military-risk> (accessed 20 March 2014); Chairman, CJCSI 3010.02D: *Guidance for Development and Implementation of Joint Concepts*, Enclosure A.

maritime forces, and how those forces contribute to security within an operational environment. It also articulated the role of Air Sea Battle within the DOTMLPF process. The difference between the ASB concept and other guiding concepts is the promotion of institutional change, theoretical alignment, and material innovation among the military services. The Navy and Air Force are not alone in the development of service integrating operational concepts. The land forces have also contributed to the concept development arena.⁴⁶

Through the creation of the Office of Strategic Land Power, the U.S. Army, USMC, and Special Operations Command (SOCOM) entered the concept development debate by publishing the *Strategic Landpower: Winning the Clash of Wills* white paper. The paper emphasizes a study of future operations within the land domain with specific emphasis on the human element. In parallel efforts, the USMC and the Army combined efforts to create the concept of *Gaining and Maintaining Access: An Army-Marine Corps Concept* (GMAC). It explained the Army and USMC's role in "defeating the area-denial capabilities within the larger context of the joint force effort to gain and maintain operational access."⁴⁷ The ASB is the proposed hypothesis for a long-range solution to an A2/AD debate. The GMAC is the proposed solution for the ground and littoral combat maneuvers within the same A2/AD environment. The central concept within the GMAC is how the Army and USMC, in concert with air and maritime assets, conduct joint entry

⁴⁶Air-Sea Battle Office, *Air-Sea Battle: Service Collaboration to Address Anti-Access and Area Denial Challenges* 2013. 1-4; Department of the Navy, *Naval Operational Concept 2010: Implementing the Maritime Strategy* 2010; John L. Barry and James Blaker, "After the Storm: The Growing Convergence of the Air Force and Navy," *Naval War College Review* LIV, no. 4 (2001): 120-133; Huba Wass de Czege, "The Costs and Risks of Airsea Battle," *Army* (November 2011), 20-23; Jonathan W. Greenert, "Air-Sea Battle Doctrine: A Discussion with the Chief of Staff of the Air Force and Chief of Naval Operations," *21st Century Defense Initiative* (The Brookings Institution, 2012), 8-10, 12-17; Jeffrey E. Kline and Wayne P. Hughes, Jr., "Between Peace and the Air-Sea Battle: A War at Sea Strategy," *Naval War College Review* 65, no. 4 (2012): 35-40; Jan Van Tol et al., *Airsea Battle: A Point-of-Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), chap. 3; Andrew Krepinevich, *Why Air Sea Battle?* (Washington, DC: 2010), 1-11.

⁴⁷Department of the Army and Department of the Navy, *Gaining and Maintaining Access: An Army-Marine Corps Concept Ver 1.0* (Washington, DC: 2012), 4.

operations in a contested environment. The *Joint Forcible Entry Operations* (JFEO) concept provides guidance for forced entry into hostile or potential hostile territory in the face of enemy opposition. *Gaining and Maintaining Access* nests with the JFEO. The JFEO provides the foundational doctrine for joint forced entry operations.⁴⁸

The military uses strategic and operational concepts to enable military discussion within the larger context of defense policy. These concepts provide a foundation for thinking about the future military environment, the structure of that military force, and how joint forces employ capabilities within environments. The JOAC, ASB, and the GMAC are part of a new line of concepts written to account of an operational environment that is dynamic and complex. These concepts lay the foundation for a force development process that begins with concept development and leads to written doctrine and troop training procedures.

The JOAC, ASB, and GMAC cover long and short-range A2/AD threats within the future environment. However, an Army-Navy operational concept is missing. An Army-Navy concept that harnesses the strength of the Army and Navy while mitigating each service's weaknesses is needed to complete the debate space and inform policy on how to operate in the Pacific. The CCJO, supported by the JOAC, emphasizes cross-domain synergy as a vital element within the concepts. Without a concept that specifically addresses the Army-Navy's operational relationship, there is a possibility for doctrine and training shortfalls that could impede operations in the future operational environment. As early as 1907, speakers from the U.S. Naval War College lectured at the U.S. Army War College about Army-Navy cooperation. By 1927, the Army and Navy were creating doctrine that specifically delineated areas of responsibility based on the necessity for

⁴⁸ Army and Navy, 4; Carl Stiner and Daniel R. Schroeder, "The Army and Joint Forcible Entry," *Army* (November 2009); Duane Riddle, Morris Minchew, and Richard Vick, *Final Report Gain and Maintain Operational Access (GAMOA) Event Report* (Fort Leavenworth: United States Army Training and Doctrine Command, 2012), 1-9; Nathan Freier, *Projecting Force Ashore: Gaining and Maintaining Operational Access* (Washington, DC: Center for Strategic and International Studies, 2012), 1-4.

cooperation and collaboration.⁴⁹ By creating a joint operational concept that drives doctrine, the concept can initiate change, alter military culture, and guide DOTMLPF procedures enabling joint operations.

A rich history of land force and maritime cooperation predates the American Revolution. As early as the First and Second Punic Wars, the utility of maritime command granted a level of independence and support that land forces lacked in previous campaigns. The Soviet Army thought so highly of the relationship that they included several pages of operational guidance on joint integration in their 1936 Field Service Regulations.⁵⁰ Many joint operations took place during the American Civil War (ACW) (1861-1865). During the Western Rivers and East Coast campaigns, the Army and the Navy adapted to changing conditions in order to meet operational objectives that linked tactical actions with strategic objectives. Joint operations were successful when forces moved past service parochialisms to meet mission objectives.

CASE STUDIES

Joint Operations in the Civil War

Upon the election and inauguration of the United States' sixteenth President, Abraham Lincoln, seven states – South Carolina, Mississippi, Florida, Alabama, Georgia, Louisiana, and Texas – severed their relations with the United States. At four-thirty in the morning on 12 April 1861, Confederate forces opened fire on federal held Fort Sumter, located at the entrance of Charleston Harbor, South Carolina. The cannonade lasted for more than thirty hours before Union

⁴⁹Joint Board, *Joint Action of the Army and the Navy* (Washington, DC: 1927), 68-72; H. S. Knapp, "Cooperation of the Army and the Navy," in *Cooperation of the Army and the Navy* (U.S. Army War College: U.S. Naval War College, 1907).

⁵⁰Charles Edward Callwell, *The Effect of Maritime Command on Land Campaigns since Waterloo* (Edinburgh: William Blackwood and Sons, 1897), 7-9; R. Ernest Dupuy and Trevor N. Dupuy, *The Harper Encyclopedia of Military History: From 3500 B.C. To the Present*, 4th ed. (New York: Harper Collins Publishers, 1993), 68-72; USSR Peoples Commissariat of Defense, *Field Service Regulations Soviet Army 1936*, trans., Charles Borman (Moscow: Soviet Military Publication Division, 1937), 121-124.

Major Robert Anderson surrendered Fort Sumter to Confederate Brigadier General Pierre G. T. Beauregard. This became the defining moment for the United States and the beginning of the ACW.⁵¹

The environment surrounding the Civil War and its causal factors are complex and dynamic. Popular accounts of the war highlight slavery-antislavery rhetoric as the main contributory cause of the war. In reality, slavery was just one of the many influences that inflamed and empowered South Carolina to lead the secessionist movement after the 1860 election. The constitutional rights of the individual States built the foundation for the secessionist movement. In addition, disagreements over Federal versus State land property and extension of slavery into new territories played extensive roles in the preceding months before the attack on Fort Sumter.⁵²

As the war commenced, the South quickly chose a defensive campaign in hopes of eroding the Union's determination to hold onto its Southern states, furthering their goal of seceding from the Union. In contrast, Lincoln's number one goal was to save and reunify the Union. With Lincoln's wartime aspirations in mind, the North developed its initial strategic objectives around reunification of the South through either defeat or destruction. To achieve the objective, the Union Armies implemented a simultaneous three-prong approach that would constrict and strangle the South over time, thereby causing the Confederates to capitulate. Named the Anaconda Plan, the first prong choked the Confederates by conducting naval blockades of the eastern and southern seabards, sealing off the South from vital resupply and incoming capital

⁵¹William J. Cooper, *We Have the War Upon Us: Onset of the Civil War, November 1860 - April 1861* (New York: Alfred A. Knopf, 2012), 3, 268-269; Allen R. Millett, Peter Maslowski, and William B. Feis, *For the Common Defense: A Military History of the United States from 1607 to 2012*, 3rd ed. (New York: Free Press, 2012), 142; Allen C. Guelzo, *The Crisis of the Civil War and Reconstruction Era* (New York: St. Martin's Press, 1995), 98-99.

⁵²Michael Golay, *Civil War* (New York: Facts On File, Inc., 2003), vii-xiv; Herman Hattaway and Archer Jones, *How the North Won: A Military History of the Civil War* (Urbana: University of Illinois Press, 1991), 1-10; Guelzo, 83-91.

from Europe. The second prong attacks focused on destroying the war-making capacity of the South by attacking logistical and political centers of gravity, and annihilating the enemy's main land forces in the West and in Virginia. The third prong was a push down the Mississippi to isolate and destroy the trans-Mississippi West. In order to bring Anaconda into fruition, the Union relied on the joint operations of both the Federal Army and Navy to achieve operational success. The Western Rivers Campaign provides numerous case studies that highlight the importance of Army and Navy cooperation in joint operations and the success it meant to the overall Union war effort.⁵³

Western River Campaign

Historically, the Mississippi River is the centerpiece of the United States' waterborne transportation and commerce. Starting in Lake Itasca, Minnesota, the river runs south 2,320 miles eventually emptying into the Gulf of Mexico. Not long after the war started, the river became a vital sea line of communication for both the North and the South. This maritime highway carried war supplies, weapons, cannons, ammunition, cargo, and soldiers up and down the western theater. In a time when most of the nation moved by manual power, the river steamboats carried whole Army divisions in one-fourth of the time required by wagon or foot. Moreover, a 500-ton steamboat could supply a land force of 40,000 men and 18,000 horses for a day when outfitted with just cargo. Because of its advantages, whoever had control of the Mississippi controlled the economic and logistical center of gravity for the West.⁵⁴

⁵³Cooper, 270-271; Reed, 3-33; Susan-Mary Grant, *A Concise History of the United States of America* (Cambridge: Cambridge University Press, 2012), 180; Archer Jones, *Civil War Command and Strategy: The Process of Victory and Defeat* (New York: The Free Press, 1992), 151-155; Millett et al., 149-156; Alfred Thayer Mahan, *The Navy in the Civil War: The Gulf and Inland Waters*, 3 vols., vol. 3 (New York: Charles Scribner's Sons, 1883), 3-5.

⁵⁴Mahan, 1-8; Christopher R. Gabel, *The Vicksburg Campaign: November 1862 - July 1863* (Washington, DC: Center for Military History, 2013), 2-17; Christopher R. Gabel, *Staff Ride Handbook for the Vicksburg Campaign: December 1862-July 1863* (Fort Leavenworth: Combat Studies Institute, U.S. Army Command and Staff College, 2001), 12-20.

To achieve strategic success during the Western River Campaign, the Union's operational approach had three phases. The first phase centered on the capture of Forts Jackson and Saint Phillip, which would lead to the capitulation of New Orleans. In the second phase, the destruction of the Confederate naval forces and fortifications located on the Mississippi would open the river for freedom of navigation for the Union. The final phase was the capture of Vicksburg, considered by President Lincoln and others as the key logistical hub of the Deep South and Midwest. Beginning in February 1862, the Union forces took almost two years to complete all of its western river objectives.⁵⁵

The Surrender of Vicksburg on 4 July 1863, followed by Port Hudson five days later, placed the Mississippi River into Union hands. Safe passage was then possible for the Union military up and down the western river system. These successful river operations on the Tennessee and Cumberland Rivers in 1862 and the siege of Vicksburg in 1863 provide thorough examples of the effects of joint operations built upon unity of effort between the Army and Navy.

Fort Henry and Fort Donelson Operation

One of the first large-scale, joint operations along the western rivers was an operation executed by Ulysses S. Grant and Captain Andrew H. Foote on the Tennessee and Cumberland Rivers. Working together, Grant and Foote fell under command of the Western Theater Commander, Major General Henry W. Halleck. Known today as a unified command system, during the Civil War it was foreign territory to place a Naval Officer under the command of the Army because no doctrine or precedent for such an arrangement existed at the time. Officers,

⁵⁵Mahan, 3; Reed, 192; David Dixon Porter, *Incidents and Anecdotes of the Civil War* (New York: D. Appleton and Company, 1885), 95-96; Michael B. Ballard, *Vicksburg: The Campaign That Opened the Mississippi* (Chapel Hill: The University of North Carolina Press, 2004), 24-25.

encouraged working together by their respective secretaries in Washington, continued to cooperate at the tactical level between the commanders.⁵⁶

Strategically, central Tennessee was vital to both the North and the South. For the South, Nashville, Tennessee, provided one of the largest industrial centers and shipping facilities for the Confederates. Second only to Virginia in its capabilities, the fertile ground provided rich farmlands and a consistent source of natural resources for vital manufacturing materials for the southern war effort. Because of Kentucky's desire to remain neutral early in the war, defensive works for Tennessee became quite complicated, requiring the Confederates to build two separate fortifications located just south of the Kentucky-Tennessee border: Fort Henry on the Tennessee River and Fort Donelson on the Cumberland River. For the Union, control of the Mississippi River system and its tributaries was essential because they were the primary means of transportation and logistical support for military operations. The scarcity and poor conditions of the road and rail networks made the river systems invaluable for operational success. In addition, by controlling the Tennessee and Cumberland Rivers, the Union split Confederate forces in half, opening a doorway to the South and control of its industrial complexes.⁵⁷

Originally, General Halleck was against the idea of an offense against the Vicksburg fortifications, but the combined efforts by both Grant and Foote, with executive pressure from President Lincoln, convinced him to approve a joint operation against the fortifications. On

⁵⁶Craig L. Symonds, *Historical Atlas of the U.S. Navy* (Annapolis, MD: Naval Institute Press, 1995), 88; Scott W. Stucky, "Joint Operations in the Civil War," *Joint Forces Quarterly* (Autumn/Winter 1995): 94-99; Symonds, ed. *Union Combined Operations in the Civil War*, 1, 51; Reed, 81-82; Paul Calore, *Naval Campaigns of the Civil War* (Jefferson: McFarland and Company, Inc., 2002), 133-134; Benton Rain Patterson, *The Mississippi River Campaign, 1861-1863* (Jefferson: McFarland and Company, Inc., 2010), 36-38.

⁵⁷Reed, 65-66; Millett et al., 165-166; Symonds, *Historical Atlas of the U.S. Navy*, 88; Stucky, "Joint Operations in the Civil War," 94-99; Calore, 133; Charles A. Hazard, "Joint Operations at Vicksburg: The Decisive Force" (USMC Command and Staff College, 2002), 8-15; Benjamin Franklin Cooling, *Fort Henry and Donelson: The Key to the Confederate Heartland* (Knoxville: The University of Tennessee Press, 1987), chap. 4.

4 February 1862, Grant loaded two divisions on thirteen transports, departing to a position a few miles north of Fort Henry for a joint coordinated attack on the two forts. On February 6, Foote opened fire with his gunboats, bombarding Fort Henry in preparation for Grant's assault on the Confederate position.⁵⁸

What Foote and Grant did not know was that because of the river and weather conditions in the winter of 1862, the river's crest was thirty feet above normal. Fort Henry was partially flooded, giving Foote a tactical height advantage since his gunboats could shoot down into the fort. The Confederate Commander, Brigadier General Lloyd Tilghman, knowing that Fort Henry had become indefensible, evacuated all but eighty of his 3,000 soldiers to Fort Donelson, leaving a small contingent to defend Fort Henry. The shooting began at 12:30 in the afternoon with heavy artillery bombardment. Foote's gunboats, closing to a range of 600 yards at times, were effective in destroying thirteen of seventeen Confederate gun emplacements. By 1:50 p.m., Foote's gunboats had overrun the Confederate position, and Tilghman surrendered the Fort. Delayed by bad weather, poor roads, and severe terrain, Grant's soldiers arrived soon after the battle ended, just in time to take control of the fortification.⁵⁹

After Fort Henry surrendered, Union forces began an overland march toward Grant's next objective twelve miles due east, the Confederate-held Fort Donelson. Sustaining severe damage to several of his ironclad ships against Fort Henry, Foote headed north to Cairo, Illinois, for repairs. Foote left one ironclad ship, the *Carondelet*, to begin the transit and early

⁵⁸Naval History Division Navy Department, *Civil War Naval Chronology, 1861-1865* (Washington, DC: U.S. Government Printing Office, 1971), II-17; Mahan, 21-24; Jean Edward Smith, *Grant* (New York: Simon and Schuster, 2001), 144-166; Calore, 134-137; Patterson, 35-64.

⁵⁹Millett et al., 166; John Y. Simon, ed. *Ulysses S. Grant: Memoirs and Selected Letters, Personal Memoirs of U.S. Grant, Selected Letters 1839-1865* (New York: The Library of America, 1990), 189-195; Ivan Musicant, *Divided Waters: The Naval History of the Civil War* (New York: Harper Collins Publishers, 1995), 191-197; Symonds, *Historical Atlas of the U.S. Navy*, 88; Stucky, "Joint Operations in the Civil War," 94-99; Dave Page, *Ships Versus Shore: Civil War Engagements Along Southern Shores and Rivers* (Nashville: Rutledge Hill Press, 1994), 255-260; Patterson, 38-42; Cooling, chap. 7.

bombardment of Fort Donelson. In addition, Foote ordered a few of his other gunboats under command of Lieutenant Phelps to steam upriver to destroy the railroad bridge connecting Bowling Green with Memphis, effectively severing a main line of communication for the South.⁶⁰

On February 12, the *Carondelet* began bombardment of Fort Donelson. Foote and three other ironclad ships arrived on February 14, and joined the attack in an effort to distract Southern forces while Grant attacked from the west. Foote and his small squadron of ships soon realized that Fort Donelson was a more heavily defended position than the one they had encountered at Fort Henry. In addition, located above the Cumberland River, the fortification had the positional advantage over the Union ironclads. After two hours of intense fighting, Foote's small fleet was nearly decimated. Although Foote's attack on Fort Donelson was a tactical failure, it distracted the Confederates long enough to allow Grant to advance on the fortification and envelope the Confederate position with 25,000 Union soldiers. Fighting through bad weather, severe conditions, and an attempted Confederate breakout, Grant successfully defeated Major General John Floyd's forces, causing an unconditional surrender of Fort Donelson on February 16.⁶¹

Analysis of the Fort Henry and Fort Donelson Operation

The Fort Henry-Donelson operation set the tone for future joint operations in the western theater. As the center of the Confederate line of defense running between Columbus, Kentucky, to Mill Spring, Kentucky, the capture of the forts was an operational necessity for the Union. Grant and Foote set an early example of leadership by exhibiting a spirit of cooperation that was rare between service professionals of the time. Both officers understood how much combat power joint operations could generate, and the synergistic effects they could bring to bear on a fortified

⁶⁰Page, 255-260; Navy Department, II-20, II-21; Musicant, 195-198; Symonds, *Historical Atlas of the U.S. Navy*, 88; Stucky, "Joint Operations in the Civil War," 94-99; Hazard, 8-15.

⁶¹Navy Department, II-22; Mahan, 25-28; Page, 260-263; Musicant, 197-202; Symonds, *Historical Atlas of the U.S. Navy*, 88; Simon, ed., 197-212; Smith, 149-163; Stucky, "Joint Operations in the Civil War," 94-99; Patterson, 45-53.

enemy. Although Halleck had a great dislike for Grant and was resentfully jealous of his capabilities and boldness on the battlefield, Foote and Grant's collaboration allowed Halleck to save face and eventually approve the Henry-Donelson operation. Halleck's actions, although self-centered, provided the initial example of a unified command structure and joint operations. While he had no explicit command authority over Foote, implicitly he supported the concept of Foote's gunboats and transports serving as a supporting element to Grant's main effort under command of the western theater commander.⁶²

Due to severe Navy personnel shortages early in the campaign, both sailors and soldiers operated Foote's gunboats. This cooperation continued throughout the western river campaign with soldiers operating many of Admiral Porter's gunboats at the Siege of Vicksburg. Although the initial plan for Fort Henry was a coordinated, simultaneous assault, the attack fell short due to severe weather and poor battlefield conditions encountered by Grant's forces. Conversely, it provided Grant proof that the Navy's new, brown water ships could be important assets providing not only transport, but protection and fire support to his land forces as well.⁶³

The Battle of Vicksburg

Labeled as the Confederate Gibraltar, Vicksburg stood as the last impediment to the Union's control of the western rivers. A vital transit artery linking the United States laterally through railroads and vertically through the Mississippi River, Vicksburg was a major transshipment location for supplies from Texas, Central America, and Europe. The city center rested 200-feet high on a bluff overlooking a hairpin turn on the eastern bank of the Mississippi. Formidable fortifications surrounded Vicksburg. The height, grade, and direction of the bluffs

⁶²Hazard, 14-15; Calore, 133-134; Hattaway and Jones, 60-66; Patterson, 35-48; Robert E. Sheridan, "The Union Attack at Drewery's Bluff: An Opportunity Lost," in *Union Combined Operations in the Civil War*, ed. Craig L. Symonds (New York: Fordham University Press, 2010), 51.

⁶³Patterson, 49-53; Calore, 133-134; Millett et al., 165; Cooling, 264-279; Robert A. Bellitto, *Vicksburg: Prologue to Joint Operations* (Newport: U.S. Naval War College, 1995), 5.

along the Yazoo and Mississippi Rivers deterred any water assault. Previous failures drove both services towards joint operations for the Vicksburg campaign. Major General Ulysses S. Grant, Brigadier General William T. Sherman, and Rear Admiral Dixon Porter led planning to capture Vicksburg beginning in December of 1862.⁶⁴

Previous experience guided Grant and Porter towards joint operations. Both men understood the importance of unity of command and effort, and open communication between services. Although Porter often felt the Army gave little credit to the Navy and did not trust West Point Officers, he developed a strong supported/supporting relationship with Grant. Porter and Sherman became life-long friends. Their relationship and cooperative spirit stood as a model of excellence throughout the campaign. The three officers pushed past traditional service parochialisms. This cooperation facilitated new solutions to complicated problems, affecting strategic outcomes of the war.⁶⁵

Grant's vision of the Vicksburg Campaign included outflanking the Confederate bastion by placing Union forces onto the bluffs behind Vicksburg. In December 1862, Grant attempted an overland approach with his Army of the Tennessee. Trying to outmaneuver Confederate forces, Grant moved 45,000 soldiers from Tennessee through the middle of Mississippi to attack the stronghold from the east. Grant eventually ended the offensive and withdrew after Confederate cavalry interdicted his supply lines. Sherman and Porter conducted a second offensive on December 26. The initial plan included an assault along the bluffs north of Vicksburg at the junction of the Yazoo River and Chickasaw Bayou. Using Porter's flotilla for transportation and

⁶⁴Porter, 95-96; Symonds, *Historical Atlas of the U.S. Navy*, 94; Reed, 225; Warren E. Grabau, *Ninety-Eight Days* (Knoxville: The University of Tennessee Press, 2000), 5; Millett et al., 194; Bellitto, 1-2; Theodore E. Devlin, *Joint Operations in the Vicksburg Campaign Unity of Command or Unity of Effort?* (Newport: U.S. Naval War College, 1998), 2-9; Chester G. Hearn, *Admiral David Dixon Porter* (Annapolis, MD: Naval Institute Press, 1996), 148; Ballard, 24-25.

⁶⁵Hearn, xvii-xx; Joseph T. Glatthaar, *Partners in Command: The Relationship between Leaders in the Civil War* (New York: The Free Press, 1994), 127, 173; Ballard, 24-25; Dale A. Nagy, *Joint Operations and the Vicksburg Campaign, 1863* (Carlisle: U.S. Army War College, 1996), 12-14.

fire support, Sherman planned a march through the bayou to attack at Haynes Bluff. After several days of intense fighting, engineering shortfalls, severe terrain, and poor weather, Sherman and Porter abandoned the attack.⁶⁶

In January 1863, Grant assumed command of McClellan's Army of the Mississippi. Merging his new expeditionary force with the Army of the Tennessee, Grant created a command of three separate corps under Sherman, McClellan, and McPherson. Amassing his Army on the west side of the Mississippi at Milliken's Bend and Young's Point, Grant spent the winter months trying to find a way around the defensive works of Vicksburg. From January to March 1863, Grant attempted several different engineering solutions to his Vicksburg problem. This included Sherman and Porter's expeditions up the Yazoo River, a movement through Steele's Bayou, and an attempt to build a canal by digging a route connecting the curves of the hairpin turn west of Vicksburg. Confederate defenses and Mother Nature thwarted each attempt, preventing Grant from meeting his objective.⁶⁷

The patience of politicians, service secretaries, and the Union public at large wearing thin, Grant began his third Vicksburg operation in March of 1863. Close coordination with Porter and Sherman produced a multi-phase operational approach that involved positioning ground forces and half of Porter's flotilla south of Vicksburg. After successfully running the Vicksburg batteries, Porter's flotilla transferred soldiers and supplies across the river at Grand Gulf, south of Vicksburg. Once across the river, Grant marched north towards Vicksburg. Concurrently, Sherman's divisions and Porter's remaining gunboats conducted deception operations north of

⁶⁶Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 18-25; Arthur L. Conger, *The Rise of U.S. Grant* (New York: Da Capo Press, 1931), 288-292; Smith, Chap. 7; Symonds, *Historical Atlas of the U.S. Navy*, 94; Michael Fellman, ed. *Memoirs of General W. T. Sherman: William Tecumseh Sherman* (New York: Penguin Books, 2000), 269-272.

⁶⁷Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 26-29; Symonds, *Historical Atlas of the U.S. Navy*, 94; Fellman, ed., 137; Thomas B. Buell, *The Warrior Generals: Combat Leadership in the Civil War* (New York: Three Rivers Press, 1997), 242-243.

Vicksburg at Haines Bluff. In addition to feint operations at Haines Bluff, a division under Sherman used cavalry raids throughout Mississippi as part of a broader deception plan.⁶⁸

Mapping a route on the west side of the Mississippi, Grant marched his Army down the Mississippi from Milliken's Bend, Mississippi to Hard Times, Louisiana, located across the river from Grand Gulf, Mississippi. On April 2, Steele's division of Sherman's corps landed at Greenville, Mississippi, north of Vicksburg. For four weeks, his cavalry raiders wreaked havoc throughout the Confederate state by cutting telegraph wires, destroying railroad tracks, and stealing livestock. The final battle for Vicksburg had begun.⁶⁹

On the night of April 16, Porter maneuvered seven ironclads, one ram, and three transport vessels past the Vicksburg batteries. For over two hours, his flotilla took plunging cannonade from the bluffs overlooking the river. When Porter finally cleared the two-mile gauntlet, his losses tallied only one transport and one coal barge. On April 22, six more transports with twelve barges attempted the same feat. The second flotilla finished the transit minus one transport and six barges. Porter, a man of foresight and with cooperative spirit, split his flotilla in half knowing that once he made the run past Vicksburg, the forces would remain separated until the fall of Vicksburg.⁷⁰

The next phase of Grant's plan began on April 29. First, Sherman conducted deception operations by leading a feint operation against Haines' Bluff on the Yazoo River. Then, Porter's southern gunboats attacked the fortifications at Grand Gulf in preparation for the troop transits

⁶⁸Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 30; Symonds, *Historical Atlas of the U.S. Navy*, 94; Buell, 243; Millett et al., 194-195; Simon, ed., 303-308

⁶⁹Patterson, 227; Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 35; Symonds, *Historical Atlas of the U.S. Navy*, 94; Buell, 244-245; Simon, ed., 317-318; Mahan, 160-162.

⁷⁰Patterson, 223-227; Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 31-34; Hearn, 209-219; Symonds, *Historical Atlas of the U.S. Navy*, 94; Mahan, 155-158; Leonard Fullencamp, Stephen Bowman, and Jay Luvaas, eds., *Guide to the Vicksburg Campaign* (Lawrence: University Press of Kansas, 1998), 120-125.

across the river. As with most of the fortifications positioned far above the water, the Navy realized it was unable to eliminate the protective works alone. Too strong and too high to destroy from the waterside, reduction of Grand Gulf required an Army attack from the east.⁷¹

Reevaluating the situation, Grant and Porter found another location ten miles south from the Hard Times landing. Running the Grand Gulf batteries on April 30, Porter met Grant and his corps across from Bruinsburg, Mississippi. Porter's flotilla transported the Union Army across the river and debarked them at the plantation landing near Bruinsburg. For several days, the Navy supported Grant by providing force protection for transport and supply ships. Sherman's deception operations played a vital role in the overall success of the mission. His actions drew Confederate forces away from Grand Gulf allowing Grant to attack a numerically inferior force at Bruinsburg. By adapting to the changing tactical conditions, Grant and Porter showed how unity of effort and collaboration facilitated tactical success.⁷²

Once on the east side of the Mississippi, Grant's Army spent the next two weeks winning smaller engagements at Grand Gulf, Port Gibson, Champion's Hill, and Big Black River, ultimately forcing the Confederates within the defenses of Vicksburg. Beginning on May 4, the Union Army and Navy conducted siege operations on Vicksburg that lasted forty-eight days. Continuous shelling and difficult conditions within the city eventually led to the Confederate surrender on 4 July 1863.⁷³

⁷¹Mahan, 162; Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 35-38; Symonds, *Historical Atlas of the U.S. Navy*, 94; Hearn, 220-227; Buell, 246; Patterson, 228-231; Reed, 253.

⁷²Mahan, 162; Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 35-38; Symonds, *Historical Atlas of the U.S. Navy*, 94; Hearn, 220-227; Buell, 246; Patterson, 228-231; Reed, 253; Patterson, chap. 24.

⁷³Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 57-59; Millett et al., 195; Lewis, 145-146; Ballard, 319-396; Gabel, *Staff Ride Handbook for the Vicksburg Campaign: December 1862-July 1863*, 80; Patterson, chap. 24.

Analysis of the Vicksburg Campaign

Most analysts consider the successful operations against Vicksburg a joint Army-Navy achievement. Vicksburg stands as an example of the synergistic power and effect of joint operations. Leaders set aside service parochialisms and selfish desires in order to achieve this success. Vicksburg was central to President Lincoln's strategic plan for the Union and capitulation of the secession states. Holding a position of strategic importance, it became an operational necessity for Grant, Porter, and Sherman.⁷⁴

The three senior officers shared a willingness to work together. In the event of mission failure, they provided top cover to the public and politicians, ensuring their reputations remained above reproach. During the Yazoo River expeditions, Porter continually used unconventional methods that contributed to the success of the operational objective before the Bruinsburg crossing. Sherman, in charge of the expeditionary land force, supported Porter and his crews when Confederate raiders and sharpshooters attacked the flotillas.⁷⁵

On numerous occasions, Grant's soldiers worked hand-in-hand with sailors to effectively man Porter's ships and guns. Sherman and Porter's deception operations north of Vicksburg during the Grand Gulf battle necessitated close cooperation between the Army and Navy. Grant and Porter continually shared a spirit of cooperation to achieve mission success. By effectively communicating and collaborating before the Vicksburg campaign, Porter knew Grant's operational and strategic priorities. Continued communication provided practical solutions to operational shortfalls. By setting the example of cooperation and unity of effort during the

⁷⁴Porter, 95; Ballard, 23-25; Jones, 159-164.

⁷⁵Porter, 124-125, 127, 148; Glatthaar, 163-182; Devlin, 2-7.

Vicksburg campaign, Grant, Porter, and Sherman set the stage for future collaboration on larger, full-scale joint operations in other campaigns.⁷⁶

East Coast Campaign

Archer Jones, author of *Civil War Command and Strategy*, wrote that Civil War strategies fit into one of two categories. They were either a strategy of combat in which the military reduces the enemy through attrition, or one of logistic strategy, beating the enemy by depriving them of logistical resources. The Union naval operations for the East and Gulf Coasts employed a two-pronged approach of seizing territory while blockading Confederate ports. Although somewhat successful, the blockade strategy did not completely prevent international trade materials from reaching Confederate ports. Limited in naval assets at the beginning of the war, the Union underwent an immense production program increasing the numbers of ships from 90 to 670 by the end of the war. Lacking a large Navy and the production capabilities to build one, the Confederates developed blockade-running tactics to overcome their maritime shortfalls.⁷⁷

Wilmington, North Carolina, located off the Cape Fear River, became the logistic center of gravity for Confederates in the East. As the South's principle seaport, the city was one of the last existing safe havens used by Confederate blockade-runners. Vital to the secession states and their military, Wilmington was a logistical necessity to ferry war materials, food, clothing, and other supplies to the southern states from Europe. However, by the spring of 1864, the tide was shifting in favor of the Union as the Confederacy focused more on coastal defense and less on blockade running. The CSA played into the strengths of the USN by ceding command of the seas

⁷⁶ Eddie L. Cole, *Grant's Integration of Land and Naval Power During the Vicksburg Campaign* (Carlisle Barracks: U.S. Army War College, 1999), 19-25; Bellitto, 5.

⁷⁷ Jones, 138-145; Virgil Carrington Jones, *The Civil War at Sea: July 1863 - November 1865, the Final Effort*, 3 vols., vol. 3 (New York: Holt, Rinehart, Winston, 1962), 300-301; Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 57-59; Millett et al., 195; Lewis, 145-146; Gabel, *Staff Ride Handbook for the Vicksburg Campaign: December 1862-July 1863*, 80.

to the USN while simultaneously depriving itself of vital commercial resources from Europe with a smaller merchant fleet.⁷⁸

With several years to build fortifications, Wilmington and the entrance to the Cape Fear River became the most heavily defended locales next to Charleston. Guarded by a series of forts, batteries, and field works, five separate shore fortifications protected two separate entrances to the Cape Fear River. Constructed to protect the New Inlet entrance, Fort Fisher was the largest and most thoroughly constructed of all Confederate shore fortifications. Constructed over a two-year period, the fort contained twenty Columbiads, three mortars, and numerous field pieces. In addition, the installation was defended by electrically controlled mines and shells buried into the land-face. Not only did Fort Fisher protect the river entrance, it also provided supporting fires to blockade-runners escaping the clutches of Union blockade ships.⁷⁹

Battle of Fort Fisher, Wilmington, North Carolina

As early as the fall of 1861, the Navy's Blockade Strategy Board made suggestions to conduct naval attacks and amphibious landings on Confederate ports and fortifications. Once these locations were secure, Union forces could move inland and attack key logistical depots and railway communication hubs. Wilmington was high on the list of objectives. However, because of a shallow, obstructed, and well-defended inlet, a Navy-only operation was out of the question.

⁷⁸Chris E. Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," in *Union Combined Operations in the Civil War*, ed. Craig L. Symonds (New York: Fordham University Press, 2012), 96-97; Chris E. Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope* (Campbell: Savas Publishing Company, 1997), chap. 1, 2; Jones, 138-145; Jones, 300-301.

⁷⁹Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 96-103; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap.1; Stucky, "Joint Operations in the Civil War," 99-104; Musicant, 418; Millett et al., 200-201; Symonds, *Historical Atlas of the U.S. Navy*, 100; Gary J. Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," *Naval War College Review* 59, no. 4 (2006): 82-86; Glatthaar, 184; Michael A. Reed, "The Evolution of Joint Operations During the Civil War" (U.S. Army Command and General Staff College, 2004), 1-10.

Similar to the western theater, a joint Army-Navy operational approach would be necessary to capture the forts and the city of Wilmington.⁸⁰

Beginning in 1862, Secretary of the Navy Gideon Welles requested Army forces for the joint operation. To Lincoln and the Army, Wilmington was not a priority. Numerous times, both neglected to provide the necessary land forces for the operation. In the fall of 1864, Admiral Farragut and the Gulf Blockading Squadron captured Mobile, Alabama, making Wilmington the last Confederate port handling goods to and from Europe. Arguing that severing the Confederate supply line would cause the military stalemate in Virginia to end, Welles convinced President Lincoln and Lieutenant General Ulysses S. Grant, the new General-in-Chief of the Army, to agree to the new operation. In December 1864, sixty-four ships of the North Blockading Squadron under command of Admiral David Dixon joined a 6,500-man expeditionary force under command of Major General Benjamin Butler as a joint force against Fort Fisher.⁸¹

First Battle for Fort Fisher

Butler, taking charge of an unconventional attack on the fort, designed and built a large floating explosive to use against the fortress. Loading the old steamer, *USS Louisiana*, with 235 tons of gunpowder, the plan was to drift the powder-boat within range of the northeastern salient of the fort, then light the fuse. Butler's idea was that the large detonation of the *Louisiana* would level a segment of the fort, thereby allowing a small contingent of Union forces to breach the wall

⁸⁰Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 99-103; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap.1; Reed, 28-30; Stucky, "Joint Operations in the Civil War," 99-104; Musicant, 418; Millett et al., 200-201; Symonds, *Historical Atlas of the U.S. Navy*, 100; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 82-86; Glatthaar, 184.

⁸¹Calore, 210-211; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 103-104; Symonds, *Historical Atlas of the U.S. Navy*, 100; Jones, 142-144; Glatthaar, 184-185; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 99; Reed, 28-30.

and take control of the fortification. After numerous delays, the force set sail for Wilmington on the morning of December 13, 1864.⁸²

At two o'clock in the morning on December 24, Porter detonated Butler's powder-boat to no effect on the fortress or its soldiers. Soon after, Porter began the conventional naval bombardment of the fort. After two days of consistent bombardment and shooting some ten thousand rounds, Porter believed the gunfire mission a success when there was no reply from the Confederate cannons. In reality, the soldiers had retreated into the bombproof shelters dug deep into the fort. Meanwhile, approximately three-thousand Union soldiers, under the command of Major General Godfrey Weitzel, embarked north of the fortress with the intention of storming the fort after the naval bombardment was complete. While the landing went unchallenged, it was not long before mines, exploding canisters, and rifle fire impeded Weitzel's landing force. Butler, not thinking his landing forces could effectively take the fort by storm, ordered the landing force to withdraw. Without completing the mission or contacting Porter, Butler ordered his transports to return to Norfolk. In his hasty departure, Butler left over seven hundred men on the beach to weather out a rising surf, poor weather, and no supplies. Butler's quick departure and thoughtless actions concerning his soldiers infuriated Porter. In time, Porter would recommence the fort bombardment to provide protective cover fire for the abandoned soldiers throughout the night. On December 27, the weather cleared enough for Porter to recover the soldiers and depart for Beaufort.⁸³

⁸²Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 86; Reed, 49-51; Calore, 210-211; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 103-104; Symonds, *Historical Atlas of the U.S. Navy*, 100; Jones, 142-144; Glatthaar, 184-185.

⁸³Stucky, "Joint Operations in the Civil War," 101-102; Musicant, 421-426; Symonds, *Historical Atlas of the U.S. Navy*, 100; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 86-90; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 104-105; Lewis, 155-157; Reed, chap. 11; Daniel Ammen, *The Navy in the Civil War: The Atlantic Coast*, 3 vols., vol. 2 (New York: Charles Scribner's Sons, 1883), 219-226; Hearn, chap. 21; Glatthaar, 185-186; Navy

The Confederates at Fort Fisher made repairs and were ready for full operations within days of the attack. In the North, Grant considered the operation “a gross and culpable failure.”⁸⁴ In a report to Welles and Secretary of War Edwin Stanton, Porter told the story of Butler’s failures, and provided detailed after-action reports by those soldiers Butler left on the beachhead. The failure ended Butler’s military career. Both Butler and Porter publicly debated the incident for decades.⁸⁵

Second Attempt

Although the first attempt at Fort Fisher bruised the Union’s cause, Sherman’s success in Atlanta and subsequent victory in Savanna helped ease the embarrassment of Butler’s follies. To support Sherman’s plan for his march up the eastern seaboard, Grant needed Wilmington as a logistical epicenter to supply Sherman’s forces throughout his campaign. With that thought in mind, Grant supported Porter’s request for a second attempt at Fort Fisher. In addition, he also granted Porter’s second request, an appeal for a new commander to lead the expedition.⁸⁶

Although Porter wanted Sherman to lead the assault force, Grant had other plans. Picked because he was dependable and easygoing, Grant chose Major General Alfred Terry to lead the second expedition against Fort Fisher. Porter and Terry met in Beaufort on January 8, 1865 to discuss the concept of operations. On January 12, Porter and Terry departed for the second attempt at Fort Fisher. The following day, Terry landed eight thousand troops north of the fort under the protection of Porter’s naval bombardment. After receiving notification that Terry had

Department, V-6; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, 132-172; Calore, 212-213; Reed, 49-51.

⁸⁴Hearn, 289.

⁸⁵Hearn, 288-289; Glatthaar, 184-185.

⁸⁶Calore, 213-214; Musicant, 426-427; Fonvielle, “Closing Down the Kingdom: Union Combined Operations against Wilmington,” 106-107; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, 191-195; Hearn, 288-289; Glatthaar, 184-185.

established a hasty lodgment and blocking position north of the fort, Porter repositioned his ships and commenced a forty-eight hour bombardment of the fortification. Applying lessons learned from the first Fort Fisher attack, Porter directed his gunships to target specific gun emplacements using detailed gunfire lines. His orders ensured maximum damage to the forts' shore batteries instead of less valuable fort structures. After reconnoitering the fort defenses, Terry communicated with Porter that the main attack on the fort was ready to commence on the afternoon of January 15, 1865.⁸⁷

One additional operation to the second attack on Fort Fisher was the inclusion of a Navy and Marine second axis of advance on the North East Bastion. Assembling 1,600 volunteer sailors from Porter's fleet, plus an additional 400 marines, the admiral conducted an amphibious landing eight hundred yards down the beachfront from the fort. The purpose was to draw fire and Confederate forces to the seaward side of the fortification while Terry's forces of eight thousand soldiers charged toward the landside of the fortification, completing a two-prong attack onto the fort. The Confederates believed the main effort was Porter's diversionary attack from the seaside while the main effort came from Terry's attack.

Once Terry's soldiers breached the landward side of the fort, they moved from gun placement to gun placement, attacking the Confederate defenders with point-blank rifle fire, bayonets, and hand-to-hand combat. Finally, after six hours of intense combat action, the Confederates retreated from the fort, attempting to escape via a boat landing at Battery Buchanan, south of Fort Fisher. To their demise, the vessels had already departed leaving a large contingent of Confederate soldiers stranded. At approximately 10:00 p.m., General Terry and his staff

⁸⁷Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 107; Reed, 68-69; Stucky, "Joint Operations in the Civil War," 101-102; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 91-92; Calore, 213-216; Musicant, 426-427; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 106-107; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, 191-195.

accepted the surrender of Fort Fisher by the fort commander. With the fall of Fort Fisher and other defensive works, Wilmington followed suit six weeks later. Once the Confederates surrendered Wilmington, they lost their last major, strategic logistical center responsible for feeding supplies to Richmond. Three months later, the ACW was over.⁸⁸

Analysis of the Battle of Fort Fisher

The battle for Fort Fisher provides a good example of how significantly leadership, culture, and cooperation affect joint operations. In addition, it supports the premise that joint operations were a necessity during the Civil War. Neither the Army nor the Navy could accomplish these missions if working as a single service. The synergistic properties that characterize joint operations cannot be duplicated when the Army or the Navy operate independently. The capture of Fort Fisher was the largest joint operation to date. The Confederate bastion was the largest of the defensive works protecting the entrance to the Cape Fear Inlets, thereby providing the main defensive works protecting Wilmington. The fort became an operational necessity as the Union tried to eliminate all logistic capabilities of the Confederates. In addition, Wilmington became the central railway hub for Sherman's push up the eastern seaboard enroute to Richmond, Virginia, maintaining supplies, weapons, and ammunition for the Union soldiers.⁸⁹

Failure of the first attack was a result of multiple factors; to pin blame on one man was unjust. Leaders at multiple levels failed to comprehend the severe disdain Porter and Butler had

⁸⁸Stucky, "Joint Operations in the Civil War," 102-103; Musicant, 427-430; Symonds, *Historical Atlas of the U.S. Navy*, 100; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 91-93; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 106-108; Lewis, 160-166; Reed, chap. 12; Ammen, 227-237; Hearn, chap. 22; Glatthaar, 185-186; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 7, chap. 8; Calore, 213-216.

⁸⁹Stucky, "Joint Operations in the Civil War," 99-104; Musicant, 418; Millett et al., 201; Symonds, *Historical Atlas of the U.S. Navy*, 100; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 99-103; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 1; Glatthaar, 184; Reed, 24-35; Calore, 208-211.

for each other. This key aspect of the relationship destroyed any serious cooperation that could have been possible if the leaders had any respect and trust for one another. Porter believed Butler to be the worst kind of political general. In turn, Porter failed to communicate effectively to Butler and therefore provided little effort to cooperate in the detonation of the Army's powder-boat or the timing of the naval bombardment on the fort. Similarly, Butler failed to effectively grasp or communicate his lack of operational understanding when using naval assets. Failure of the landing party and their subsequent withdrawal from the beach was caused by Butler's ignorance, which affected the timing and sequencing of the operation. Failure to communicate and petty squabbles between the two leaders clouded their judgment, which affected the overall outcome. Both individuals failed to integrate their efforts toward a common goal, leading to overall mission failure. The lack of leadership by one unified commander was another shortcoming that caused mission failure. During joint operations, cooperation was often ad hoc and left to the tactical commanders. When lacking a positive relationship such as that maintained by Sherman, Grant, and Porter during the battle of Vicksburg, positive results were nearly impossible to come by.⁹⁰

In contrast, when the two leaders effectively communicated and focused their services' unique capabilities into a joint operation on a grand scale, the success of the second attack exhibited a level of cooperation and synergy that was unknown previously. The unity of effort and constant communication between Porter and Terry allowed the Officers to make tactical decisions to support the operational end state during the attack. Applying lessons learned from the previous attack, both Officers were able to make changes that contributed to mission success. In

⁹⁰Stucky, "Joint Operations in the Civil War.;" Musicant, 421-426; Symonds, *Historical Atlas of the U.S. Navy*, 100; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War.;" Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 104-105; Lewis, 155-157; Reed, chap. 11; Ammen, 219-226; Hearn, chap. 21; Glathhaar, 185-186; Navy Department, V-6; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, 132-172; Reed, 52-63; Calore, 212-213.

addition, by providing a Navy landing force, the Navy provided a second axis of advance against the fort. This distracted Confederate defenders that supported Terry's main effort, which led to the overall success of the operational objectives.⁹¹

ANALYSIS AND FINDINGS

The Capture of Fort Henry and Fort Donelson, the Battle of Vicksburg, and the Fort Fisher Campaign provides a unique opportunity to analyze three, separate case studies within the same conflict that exhibit traits still necessary in today's joint environment. The case studies are examined through the lens of operational necessity, leadership, cooperation, and synergy as the analysis criteria. Each case study answers the questions of whether joint operations were an operational necessity for the Union's strategic success; what role did leadership play in achieving unity of effort during the operation; did the spirit of cooperation really matter; and was there a synergistic effect from the joint operation?

The capture of Fort Henry and Fort Donelson was an operational necessity for the Union. Grant and Foote's tactical actions were able to give the Union an operational level advantage by opening up the Cumberland and Tennessee Rivers to Union forces allowing them additional access to terrain within the western theater. Their actions split the center of Confederate defenses within the state of Kentucky, giving Union forces open access to affect Confederate lines of communications all the way to Alabama. In addition, the Mississippi River was an important strategic objective by President Lincoln. In order to use the river unimpeded, the Union had to control the river from its source in the north to the Gulf of Mexico.⁹²

⁹¹Calore, 213-216; Musicant, 427-430; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 106-108; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 8; Lewis, 160-166; Reed, chap. 12; Ammen, 227-237; Reed, 79-95.

⁹²Cooling, 44-62; Patterson, 35,47; Reed, 65; Calore, 213-216; Musicant, 427-430; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 106-108; Fonvielle, *The*

Leadership was an important element in the successful capture of the two forts. In the initial stages of the war, the Army and Navy were developing early river and gunboat design concepts. Foote and his staff laid the groundwork in early development, working with the ship engineers and ship building facilities, and fulfilling the role of Liaison Officer to the Army in order to finish the gunboats. Grant, understanding the strategic importance of the forts, worked in cooperation with Foote to help get the gunboats completed and ready for the operation. Both Officers had to work together to earn the approval of Halleck, the theater commander, to conduct the attack. In addition, due to Navy manning shortfalls, Foote relied upon a mixed crew of both soldiers and sailors to staff his new gunboats.⁹³

Due to poor weather and difficult overland access to Fort Henry, the first attack on the fortification lacked any synergistic effects from the Army and Navy operation. Similarly, due to Foote's flotilla taking severe damage early in the Fort Donelson operation, the success of that operation became an Army success vice a joint effort. Although the operation lacked synergy, Grant saw firsthand how the new gunboats could provide an additional capability to his operational approach. When the river was the only line of communication able to support mass transport of soldiers and supplies, the flotilla was an important asset for Grant. In addition, the Navy ships were able to provide gunfire support to Grant's land force, and provide an avenue for a supporting effort from the waterside while Grant's forces were the main effort in the operation.⁹⁴

Wilmington Campaign: Last Rays of Departing Hope, chap. 8; Lewis, 160-166; Reed, chap. 12; Ammen, 227-237; Reed, 79-95.

⁹³Calore, 133; Patterson, 36-42; Bellitto, 5; Cooling, 44-81; Patterson, 35,47; Reed, 65.

⁹⁴Stucky, "Joint Operations in the Civil War," 94-99; Cooling, 101-166; Earl B. Hailston, *Joint Operations in the Civil War: The Mississippi* (Carlisle: U.S. Army War College, 1989); Calore, 133; Patterson, 36-42; Bellitto, 5.

The Union considered Vicksburg, a logistic center of gravity for the Confederates in the West, to be the key to ending the war. A vital logistical node between the West and the East, it also controlled Union maritime traffic up and down the Mississippi. It was an operational necessity if the Union wanted complete control of the Mississippi.⁹⁵

Strategic leadership by Grant, Porter, and Sherman throughout the battle of Vicksburg translated directly to the battlefield. Never willing to quit, all three Officers were an example of tenacity at its finest; each one-stepping forward to lead as the situation dictated. The senior leaders met often and communicated frequently as required by the operation. This frequent communication allowed a rare unity of effort among the commanders when separate services were involved. From the lens of cooperation, all three Officers worked consistently to develop unconventional solutions to complex problems that allowed Grant's forces to seize the Confederate stronghold. From the Yazoo river expeditions to the main attack on Vicksburg, cooperation was one of the underlying factors that brought success to the operation. From the beginning, Porter knew and understood Grant's strategic and operational priorities, allowing him and his flotilla to support the operation that best fit mission requirements.⁹⁶

With the inclusion of joint operations during the battle, Grant was able to combine and coordinate combat strengths while minimizing service shortfalls to provide a synergistic effect from the joint operations. Sherman's feint north of Vicksburg allowed Porter to begin crossing the Mississippi in the south. As the siege of Vicksburg began, the Navy provided gunfire support from the river as land forces surrounded the fortification. Neither service could have successfully

⁹⁵Hattaway and Jones, 60-66; Cooper, 270-271; Nagy, 1-3; Porter, 95; Ballard, 23-25.

⁹⁶Glatthaar, 163-167, 189; Hearn, xvii-xx; Lewis, 130-145; Porter, 127, 173; Ballard, 24-25; Nagy, 12-14; Hailston, 10-28; Hazard, 21-32, 43.

captured the fortification without assistance from the other. The synergistic effects of joint operations made the battle of Vicksburg a Union success story.⁹⁷

The battle of Fort Fisher is a narrative with two endings: one a failure, the other a success. From its commencement, Fort Fisher's first battle was wrought with difficulties. At that stage of the war, Wilmington had become one of the last safe ports for Confederate blockade-runners as well as a center railway hub for the Confederates in the eastern theater. Grant, wanting to support Sherman's march up the eastern seaboard from Savannah, knew he needed control of the railway to support Sherman's divisions. It was for this reason that Wilmington and Fort Fisher became an operational necessity for the Union.⁹⁸

Two of the biggest failures during the first attack were a failure in leadership and a failure in cooperation. When it came time to select the Officers, Butler and Porter led the attack on the fort. Grant knew that Porter and Butler had misgivings working together, but decided to go against his better judgment. Because of this innate dislike for each other, Porter and Butler failed to build a trusting and cooperative relationship needed in the complex operation against the fort. Both Officers failed to set the example of leadership by allowing service parochialisms and selfish political desires get in the way of the operation. This bickering and infighting, combined with poor weather, set off a chain of events that would eventually leave seven hundred soldiers on the beach, end Butler's military career, and leave Fort Fisher still in the hands of the Confederates. Due to communication shortfalls and relationship misgivings between Officers, the

⁹⁷Gabel, *The Vicksburg Campaign: November 1862 - July 1863*, 35; Symonds, *Historical Atlas of the U.S. Navy*, 94; Buell, 244-245; Simon, ed., 317-318; Mahan, 160-162; Devlin, 9-20; Cole, 19-21, 23-25; Glatthaar, 163-167, 189; Hearn, xvii-xx; Lewis, 130-145; Porter, 127, 173; Ballard, 24-25; Nagy, 12-14.

⁹⁸Musican, 418, 421-426; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 99-105; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 1, chap. 5; Stucky, "Joint Operations in the Civil War," 99-104; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 82-86; Reed, 24-35.

timing for detonation of the powder-boat, the naval bombardment, and the beach assault all failed to provide the necessary synergistic effects required to capture the massive fortification.⁹⁹

In contrast to the first Fort Fisher expedition, the second attack on the Confederate bastion had the opposite results. The outcome of the second attack shows how effective joint operations can be when there is not a deficiency in leadership or cooperation. The operational necessity for the city of Wilmington had not changed. Grant ordered Terry to work wholeheartedly with Porter for the duration of the offense. From the onset, both Terry and Porter developed a sense of trust and spirit of cooperation that worked hand-in-hand to achieve a Union victory built on Army-Navy joint operation. Their leadership moved beyond the service parochialisms to ensure nothing got in the way of victory over the enemy.¹⁰⁰

The cooperation between Terry and Porter at Fort Fisher was much like that of Grant, Sherman, and Porter during the Battle of Vicksburg. Both Officers met and reviewed the after-action reports from the previous attack in order to make necessary changes so mistakes would not be repeated. Terry made every effort to maintain communications with Porter during the attack, ensuring the fleet applied the right firepower down the necessary firing line. In addition, by providing a second axis of advance onto the fort, Porter was able to collect two thousand Navy and Marine volunteers to conduct a feint that supported Terry's main effort of a riverside attack. The outcome of the second attack on Fort Fisher is a true testament to what synergy can bring to the battlefield. The combined efforts ensured that the strength of both services overcame any

⁹⁹Stucky, "Joint Operations in the Civil War," 99-104; Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 90-96; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 99-105; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 5; Reed, chap. 11; Musicant, 418, 421-426; Reed, 24-35.

¹⁰⁰Ohls, "Fort Fisher: Amphibious Victory in the American Civil War," 90-96; Fonvielle, "Closing Down the Kingdom: Union Combined Operations against Wilmington," 106-108; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 7, chap. 8; Stucky, "Joint Operations in the Civil War," 99-104; Ammen, 227-237; Reed, 79-95.

weakness of either single service. Both Officers, under unity of effort, led their respective services in a way that maximized the effects of the joint operations.¹⁰¹

CONCLUSION

Conclusion

Commander H. S. Knapp, while conducting lectures at the Army War College in 1907, described Army-Navy cooperation using the metaphor of a whole body. The Army and Navy resemble the arms and legs – distinctly independent in scope and purpose, but still acting instinctively together to obey the will of the larger whole. Admiral Sergei Gorshkov, considered by Western naval experts to be the Soviet Mahan, once said, “The unity of the effort of the army and navy improved their combat capabilities. With the navy’s direct support the ground forces radically changed the qualitative and quantitative correlation of forces to their advantage”¹⁰² Gorshkov observed the close mutual support and cooperation between the Soviet Army and Navy and how they acted as force multipliers against the German Wehrmacht during World War II. In the twenty-first century, the Army-Navy relationship is no less important.¹⁰³

Supporting the ground forces, the Navy has the ability to employ blockading tactics, destroy enemy naval forces, neutralize shore-based enemy combatants, prevent the arrival of enemy forces and supplies, and protect the flank of friendly ground forces. Likewise, ground forces provide support to naval forces by seizing objectives near the enemy coast in support of sea control, seizing control of key offshore islands, bases, and ports, and help reduce enemy

¹⁰¹Reed, chap. 12; Reed, 79-95; Glatthaar, 185-186; Stucky, “Joint Operations in the Civil War,” 99-104; Fonvielle, “Closing Down the Kingdom: Union Combined Operations against Wilmington,” 106-108; Fonvielle, *The Wilmington Campaign: Last Rays of Departing Hope*, chap. 7, chap. 8; Ammen, 227-237.

¹⁰²Jacob W. Kipp, *The Navy and Combined Operations: A Century of Continuity and Change, 1853-1945* (Fort Leavenworth, KS: Soviet Army Studies Office, U.S. Army Combined Arms Center, 1987), 80; Knapp, 1.

¹⁰³Kipp, 80; Knapp, 1.

controlled naval territory. These are just a few of the offensive and defensive missions maritime and land forces are able to conduct in support of the Joint Force Commander and the operational objectives required to accomplish as part of the broader strategic objectives.¹⁰⁴

Joint operations can provide both advantages and disadvantages for the operational commander. When the Joint Force Commander is able to combine capabilities from multiple services, they are able to employ a range of capabilities against an enemy threat that no single service is able to achieve singlehandedly. Additionally, the commander can employ those joint capabilities both symmetrically and asymmetrically to achieve a synergistic effect against the enemy threat. The disadvantages include the complexity of operations, differences in the ways of warfare, varying decision-making processes, service biases, culture disparities, and diverse doctrine and operational terms.¹⁰⁵

A combination of the 2010 NSS and the 2012 DSG recently changed the military's outlook of the future. A vision clouded by ten years of war in the Middle East is adapting to new strategic priorities in the Asia-Pacific. In response, a stream of new concepts have emanated from the Pentagon. These concepts guide future doctrine development, and training for military forces operating in the new environment. One important document that has yet to be addressed or written is a joint Army-Navy concept.¹⁰⁶

As the DOD enters another post-war period, it is vital that the military thinks of new and creative ways to apply combat power against an unknown enemy. Transformation for any military service is difficult, and it must be navigated carefully. A great deal of organizational and historical research exists that can help guide military service professionals through the

¹⁰⁴ Vego, "Major Joint/Combined Operations," 117-118; Peoples Commissariat of Defense, 121-124.

¹⁰⁵ Vego, "Major Joint/Combined Operations," 113, 120.

¹⁰⁶Chairman, CJCSI 3010.02D: *Guidance for Development and Implementation of Joint Concepts*.

transformation process. Yet, while the process is important, the cornerstone of any change initiative lies with the culture of the organization and its leadership.

Historical examples prove that there is an operational necessity for the Army-Navy to function as a cohesive team. Cultural biases and service parochialisms can create service silos within the DOD that prevent new concepts from developing. If the separate services are unable to justify their existence in the new operating environment, they could easily find themselves on the losing end of the Congressional budget debate. Over the past several years, the Navy and Air Force have cornered the A2/AD discussion. By publishing concepts early, the two services became the driving force in the concept development dispute. The Army and USMC eventually published a land force concept that focuses on the human domain, but the DOD still lacks a joint Army-Navy concept. A joint concept would cross over cultural boundaries in order to meet strategic objectives. By developing concepts that support strategic direction, the Army and Navy can ensure a solid foothold in the funding debate.

Recommendations

A productive discourse regarding the way ahead in this latest of interwar periods requires the development of a joint Army-Navy concept, particularly as the military shifts its focus to the Asia-Pacific region. Once that concept is developed, laying the foundation for the creation of doctrine, it will support useful research to assess how the Army and Navy can mutually support each other across their broad span of mission essential tasks and operational capabilities. There is also a need to evaluate how the Army's capabilities could complement those of the Marines without duplicating capabilities that already exist. Professional military education should focus on training and educating officers to perform liaison roles between the Army and Navy, and officers should serve in such assignments after completing staff college to facilitate inter-service

cooperation during training and exercises. These recommendations would be small, but important steps to fulfill the future requirements of cross-domain synergy as defined in the JOAC.¹⁰⁷

¹⁰⁷Davis and Shapiro, eds., 177-179; Kipp, 72

BIBLIOGRAPHY

Abbott, H. Porter. *The Cambridge Introduction to Narrative*. 2nd ed. New York: Cambridge University Press, 2008.

Ammen, Daniel. *The Navy in the Civil War: The Atlantic Coast*. Vol. 2. New York: Charles Scribner's Sons, 1883.

Army, Department of the and Department of the Navy. *Gaining and Maintaining Access: An Army-Marine Corps Concept Ver 1.0*. Washington, DC: 2012.

Ballard, Michael B. *Vicksburg: The Campaign That Opened the Mississippi*. Chapel Hill: The University of North Carolina Press, 2004.

Baptista, José Pedro Filipe de Oliveira. "Power Transitions and Conflict: Applying Power Transition Theory and Liberal-Institutionalist Theory to US-China Relations." University Of Oslo, 2012.

Barry, John L. and James Blaker. "After the Storm: The Growing Convergence of the Air Force and Navy." *Naval War College Review* 56, no. 4 (2001): 117-133.

Bellitto, Robert A. *Vicksburg: Prologue to Joint Operations*. Newport: U.S. Naval War College, 1995.

Berger, Peter L. and Thomas Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books, 1966.

Board, Joint. *Joint Action of the Army and the Navy*. Washington, DC, Government Printing Office: 1927.

Buell, Thomas B. *The Warrior Generals: Combat Leadership in the Civil War*. New York: Three Rivers Press, 1997.

Builder, Carl H. *The Mask of War: American Military Styles in Strategy and Analysis*. Baltimore: The John Hopkins University Press, 1989.

Callwell, Charles Edward. *The Effect of Maritime Command on Land Campaigns since Waterloo*. Edinburgh: William Blackwood and Sons, 1897.

Calore, Paul. *Naval Campaigns of the Civil War*. Jefferson: McFarland and Company, Inc., 2002.

Chairman, Joint Chief of Staff. CJCSI 3010.02D, *Guidance for Development and Implementation of Joint Concepts*. Washington, DC: Government Printing Office, 2013.

_____. *Capstone Concept for Joint Operations: Joint Force 2020*. Washington, DC: 2012.

_____. *The Joint Operational Access Concept (JOAC)*. Washington, DC: Department of Defense, 2012.

Citino, Robert Michael *The German Way of War: From the Thirty Years' War to the Third Reich*. Lawrence, KS: University Press Kansas, 2005.

Cohen, Eliot A. and John Gooch. *Military Misfortunes: The Anatomy of Failure in War*. New York: The Free Press, 1990.

Cole, Eddie L. *Grant's Integration of Land and Naval Power During the Vicksburg Campaign*. Carlisle Barracks: U.S. Army War College, 1999.

Command, U.S. Joint Forces. Joint Publication 1, *Doctrine for the Armed Forces of the United States*. Norfolk, VA: U.S. Joint Forces Command, 2013.

_____. Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*. Norfolk, VA: U.S. Joint Forces Command, 2010.

_____. Joint Publication 3-0, *Joint Operations*. Norfolk, VA: U.S. Joint Forces Command, 2011.

Command, United States Joint Forces. *The Joint Operating Environment*. Suffolk, VA: Government Printing Office, 2010.

Conger, Arthur L. *The Rise of U. S. Grant*. New York: Da Capo Press, 1931.

Cooling, Benjamin Franklin. *Fort Henry and Donelson: The Key to the Confederate Heartland*. Knoxville: The University of Tennessee Press, 1987.

Cooper, William J. *We Have the War Upon Us: Onset of the Civil War, November 1860 - April 1861*. New York: Alfred A. Knopf, 2012.

Cordesman, Anthony H. *The New US Defense Strategy and the Priorities and Changes in the FY2013 Budget*. Washington, DC: 2012.

Corum, James C. *The Roots of Blitzkrieg: Hans Von Seeckt and German Military Reform*. Lawrence: University Press of Kansas, 1992.

Council, National Intelligence. *Global Trends 2030: Alternative Worlds*. Washington, DC: 2012.

Creveld, Martin Van. *The Changing Face of War*. New York: Ballantine Books, 2006.

Dale, Catherine and Pat Towell. *In Brief: Assessing the January 2012 Defense Strategic Guidance (DSG)*. Washington, DC: 2013.

Davis, Lynn E. and Jeremy Shapiro, eds. *The U.S. Army and the New National Security Strategy*. Arlington, VA: RAND, 2003.

Davis, Paul K., Stuart E. Johnson, Duncan Long and David C. Gompert. *Developing Resource-Informed Strategic Assessments and Recommendations*. Arlington, VA: RAND, National Defense Research Institute, 2008.

Department of Defense, *Capstone Concept for Joint Operations: Joint Force 2020*. Washington, DC: Government Printing Office, 2012.

_____. *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. Washington, DC: Government Printing Office, 2012.

Devlin, Theodore E. *Joint Operations in the Vicksburg Campaign Unity of Command or Unity of Effort?* Newport: U.S. Naval War College, 1998.

DiMarco, Joyce. "Service Culture Effects on Joint Operations: The Masks of War Unveiled." U.S. Army School for Advanced Military Studies, 2004.

Donnelly, Thomas and Frederick W. Kagan. *Ground Truth: The Future of U.S. Land Power.* Washington, DC: AEI Press, 2008.

Dorn, Edwin and Howard D. Graves. *American Military Culture in the Twenty-First Century.* Washington, DC: Center for Strategic and International Studies, 2000.

Dörner, Dietrich. *The Logic of Failure.* New York: Metropolitan Books, 1996.

Dupuy, R. Ernest and Trevor N. Dupuy. *The Harper Encyclopedia of Military History: From 3500 B.C. To the Present.* 4th ed. New York: Harper Collins Publishers, 1993.

Fellman, Michael, ed. *Memoirs of General W. T. Sherman: William Tecumseh Sherman.* New York: Penguin Books, 2000.

Fonvielle, Chris E. "Closing Down the Kingdom: Union Combined Operations against Wilmington." In *Union Combined Operations in the Civil War*, edited by Craig L. Symonds. New York: Fordham University Press, 2012.

_____. *The Wilmington Campaign: Last Rays of Departing Hope.* Campbell: Savas Publishing Company, 1997.

Ford, Edward L. *An Analysis of U.S. Air Force & Army Transformations.* Carlisle, PA: U.S. Army War College, 2007.

Freier, Nathan. "Challenges to American Access: The Joint Operational Access Concept and Future Military Risk." Center for Strategic and International Studies. <http://csis.org/publication/challenges-american-access-joint-operational-access-concept-and-future-military-risk> (accessed 20 March 2014).

_____. *Projecting Force Ashore: Gaining and Maintaining Operational Access.* Washington, DC: Center for Strategic and International Studies, 2012.

Fullan, Michael. *Leading in a Culture of Change.* San Francisco: Jossey-Bass, 2001.

Fullencamp, Leonard, Stephen Bowman and Jay Luvaas, eds. *Guide to the Vicksburg Campaign.* Lawrence: University Press of Kansas, 1998.

Gabel, Christopher R. *Staff Ride Handbook for the Vicksburg Campaign: December 1862-July 1863.* Fort Leavenworth: Combat Studies Institute, U.S. Army Command and Staff College, 2001.

_____. *The Vicksburg Campaign: November 1862 - July 1863.* Washington, DC: Center for Military History, 2013.

Garamone, Jim. "Dempsey Releases Concept to Build Joint Force 2020." U.S. Department of Defense. <http://www.defense.gov/news/newsarticle.aspx?id=118043> (accessed 5 March 2014).

Gat, Azar. *A History of Military Thought: From the Enlightenment to the Cold War*. Oxford: Oxford Press, 2001.

Gerson, Michael and Alison Lawler Russell. "American Grand Strategy and Seapower." In *CNA Analysis and Solutions: American Grand Strategy and Seapower*. Washington, DC: CNA Analysis and Solutions, 2011.

Glatthaar, Joseph T. *Partners in Command: The Relationship between Leaders in the Civil War*. New York: The Free Press, 1994.

Golay, Michael. *Civil War*. New York: Facts On File, Inc., 2003.

Gompert, David C. and Phillip S. Saunders. *The Paradox of Power: Sino-American Strategic Restraint in an Age of Vulnerability*. Washington, DC: National Defense University Press, 2011.

Gompert, David C. *Sea Power and American Interests in the Western Pacific*. Santa Monica: RAND National Defense Research Institute, 2013.

Grabau, Warren E. *Ninety-Eight Days*. Knoxville: The University of Tennessee Press, 2000.

Grant, Susan-Mary. *A Concise History of the United States of America*. Cambridge: Cambridge University Press, 2012.

Gray, Collins S. *Another Bloody Century*. London: Phoenix, 2005.

Greenert, Jonathan W. "Air-Sea Battle Doctrine: A Discussion with the Chief of Staff of the Air Force and Chief of Naval Operations." In *21st Century Defense Initiative*: The Brookings Institution, 2012.

Guelzo, Allen C. *The Crisis of the Civil War and Reconstruction Era*. New York: St. Martin's Press, 1995.

Hailston, Earl B. *Joint Operations in the Civil War: The Mississippi*. Carlisle: U.S. Army War College, 1989.

Hatch, Mary Jo and Ann L. Cunliffe. *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*. Second ed. Oxford: Oxford University Press, 2006.

Hattaway, Herman and Archer Jones. *How the North Won: A Military History of the Civil War*. Urbana: University of Illinois Press, 1991.

Hazard, Charles A. "Joint Operations at Vicksburg: The Decisive Force." USMC Command and Staff College, 2002.

Headquarters, Department of the Army. (*ADRP 6-22.*) *Army Leadership*. Washington, DC: Department of the Army, 2012.

Hearn, Chester G. *Admiral David Dixon Porter*. Annapolis, MD: Naval Institute Press, 1996.

Hiro, Shri Dilip. "The Sole Superpower in Decline: The Rise of a Multipolar World." *Military Review* July-August, (2008): 140-144.

Hofstede, Geert and Gert Jan Hofstede. *Cultures and Organizations: Software of the Mind*. New York: McGraw-Hill, 2005.

Jones, Archer. *Civil War Command and Strategy: The Process of Victory and Defeat*. New York: The Free Press, 1992.

Jones, Virgil Carrington. *The Civil War at Sea: July 1863 - November 1865, the Final Effort*. Vol. 3. New York: Holt, Rinehart, Winston, 1962.

Kem, Jack D. "Military Transformation: Ends, Ways, and Means." *Air & Space Power Journal* Fall, (2006): 1-4

Kiesling, Eugenia C. "Resting Uncomfortably on Its Laurels: The Army of Interwar France." In *The Challenge of Change*, edited by Harold R. Winton and David R. Mets, 1-34. Lincoln: University of Nebraska Press, 2000.

Kipp, Jacob W. *The Navy and Combined Operations: A Century of Continuity and Change, 1853-1945*. Fort Leavenworth, KS: Soviet Army Studies Office, U.S. Army Combined Arms Center, 1987.

Kline, Jeffrey E. and Wayne P. Hughes, Jr. "Between Peace and the Air-Sea Battle: A War at Sea Strategy." *Naval War College Review* 65, no. 4 (2012): 35-40.

Knapp, H. S. "Cooperation of the Army and the Navy." In *Cooperation of the Army and the Navy*. U.S. Army War College: U.S. Naval War College, 1907.

Kotter, John P. and Leonard A. Schlesinger. "Choosing Strategies for Change." *Harvard Business Review* July-August, (2008): 130-140.

Kotter, John P. "Leading Change: Why Transformation Efforts Fail." *Harvard Business Review* January, (2001): 96-103.

_____. "Ten Observations." *Executive Excellence* August, (1999): 15-16.

_____. *Power and Influence: Beyond Formal Authority*. New York: The Free Press, 1985.

Kramer, Eric-Hans. *Organizing Doubt: Grounded Theory, Army Units and Dealing with Dynamic Complexity*, Edited by Stewart R. Clegg and Ralph Stables. Slovenia: Liber and Copenhagen Business School Press, 2007.

Krepinevich, Andrew, Simon Chin and Todd Harrison. *Strategy in Austerity*. Washington, DC: 2012.

_____. "The Army and Land Warfare: Transforming the Legions." *Joint Forces Quarterly* (Autumn 2002): 76-82.

Krepinevich, Andrew. *Joint Concept Development and Experimentation*. Washington, DC: Center for Strategic and Budgetary Assessments, 2011.

_____. *Why Air Sea Battle?* Washington, DC: Center for Strategic and Budgetary Assessments, 2010.

Kurchner-Hawkins, Ronnie, and Rima Miller. "Organizational Politics: Building Positive Political Strategies in Turbulent Times." In *Handbook of Organizational Politics*, edited by Eran Vigoda-Gadot and Amos Drory, 328-351. Cheltenham, UK: Edward Elgar, 2006.

Lewis, Paul. *Yankee Admiral: A Biography of David Dixon Porter*. New York: David McKay Company, Inc., 1968.

Liang, Qiao and Wang Xiangsui. *Unrestricted Warfare: China's Master Plan to Destroy America*. Panama City, Panama: Pan American Publishing Company, 1999.

Linn, Brian McAllister. *The Echo of Battle: The Army's Way of War*. Cambridge: Harvard University Press, 2007.

Macgregor, Douglas A. *Transformation under Fire: Revolutionizing How America Fights*. Westport, CT: Praeger Publishers, 2003.

Mahan, Alfred Thayer. *The Navy in the Civil War: The Gulf and Inland Waters*. Vol. 3. New York: Charles Scribner's Sons, 1883.

Mahnken, Thomas G., and James R. FitzSimonds. "Tread-Heads or Technophiles? Army Officer Attitudes toward Transformation." *Parameters* 2004, no. Summer (2004): 16.

Manyin, Mark E., Stephen Daggett, Ben Dolven, Susan V. Lawrence, Michael F. Martin, Ronald O'Rourke, and Bruce Vaughn. *Pivot to the Pacific? The Obama Administration's "Rebalancing" toward Asia*. Washington DC: Congressional Research Service, 2012.

Meriac, John P. and Peter D. Villanova. "Agreeable and Extraversion as Moderators of the Political Influence Compatibility - Work Outcomes Relationship." In *Handbook of Organizational Politics*, edited by Eran Vigoda-Gadot and Amos Drory, 16-27. Cheltenham, UK: Edward Elgar, 2006.

Merriam-Webster, "Dictionary", Merriam-Webster, Incorporated. <http://www.merriam-webster.com/dictionary/cooperation> (accessed 10 April 2014).

Messina, Barry P. *Development of U.S. Joint and Amphibious Doctrine, 1898-1945*. Alexandria, VA, 1994, CRM 94-103.

Miller, Randolph P. *U.S. Military Transformation and Experimentation Historical Perspectives, Prospects, and Prescription*. Maxwell Air Force Base, Alabama: University of Pittsburgh, 2002.

Millett, Allen R., Peter Maslowski, and William B. Feis. *For the Common Defense: A Military History of the United States from 1607 to 2012*. 3rd ed. New York: Free Press, 2012.

Murphy, Thomas Joseph. *Army-Navy Integration*. Fort Leavenworth, KS: Center for Army Lessons Learned, 2010.

Murray, Williamson and Allan R. Millett. *Military Innovation in the Interwar Period*. 21st ed. Cambridge: Cambridge University Press, 1996.

Murray, Williamson. "Institute for Defense Analyses, Two Lectures." In *Military Innovation*. Alexandria, VA: Institute For Defense Analyses, 2002.

Musicant, Ivan. *Divided Waters: The Naval History of the Civil War*. New York: Harper Collins Publishers, 1995.

Nagy, Dale A. *Joint Operations and the Vicksburg Campaign, 1863*. Carlisle: U.S. Army War College, 1996.

Navy Department, Naval History Division. *Civil War Naval Chronology, 1861-1865*. Washington, DC: U.S. Government Printing Office, 1971.

_____. *Naval Operational Concept 2010: Implementing the Maritime Strategy*, 2010.

Office of the President, United States of America. *National Security Strategy*. Washington DC: Government Printing Office, 2010.

Office, Air-Sea Battle. *Air-Sea Battle: Service Collaboration to Address Anti-Access and Area Denial Challenges*, 2013.

Ohls, Gary J. "Fort Fisher: Amphibious Victory in the American Civil War." *Naval War College Review* 59, no. 4 (2006): 81-99.

Olsen, Paul A. *Operation Corporate: Operational Art and Implications for the Joint Operational Access Concept*. Fort Leavenworth, 2012.

Page, Dave. *Ships Versus Shore: Civil War Engagements Along Southern Shores and Rivers*. Nashville: Rutledge Hill Press, 1994.

Paret, Peter. ed. *Makers of Modern Strategy from Machiavelli to the Nuclear Age*. Princeton, New Jersey: Princeton University Press, 1986.

Patterson, Benton Rain. *The Mississippi River Campaign, 1861-1863*. Jefferson: McFarland and Company, Inc., 2010.

Peoples Commissariat of Defense, USSR. *Field Service Regulations Soviet Army 1936*. Translated by Charles Borman. Moscow: Soviet Military Publication Division, 1937.

Porter, David Dixon. *Incidents and Anecdotes of the Civil War*. New York: D. Appleton and Company, 1885.

Reed, Michael A. "The Evolution of Joint Operations During the Civil War." Command and General Staff College, 2004.

Reed, Rowena. *Combined Operations in the Civil War*. Annapolis: United States Naval Institute, 1978.

Riddle, Duane, Morris Minchew and Richard Vick. *Final Report Gain and Maintain Operational Access (GAMOA) Event Report*. Fort Leavenworth: United States Army Training and Doctrine Command, 2012.

Schein, Edgar H. *Organizational Culture and Leadership*. 4th ed. San Francisco: Jossey-Bass, 2010.

Shah, Syed Kamran Ali, Jam Javed Iqbal, Adeel Razaq, Muhammand Yameen, Suleman Sabir and Muhammad Asif Khan. "Influential Role of Culture on Leadership Effectiveness and Organizational Performance." *Information Management and Business Review* 3, no. 2 (2011): 127-132.

Sheridan, Robert E. "The Union Attack at Drewery's Bluff: An Opportunity Lost." In *Union Combined Operations in the Civil War*, edited by Craig L. Symonds. New York: Fordham University Press, 2010.

Showalter, Dennis E. "Military Innovation and the Whig Perspective of History." In *The Challenge of Change: Military Institutions and New Realities, 1918-1941*, edited by Harold R. Winton and David R. Mets, 220-236. Lincoln: University of Nebraska Press, 2000.

Silverthorne, Colin P. *Organizational Psychology in Cross-Cultural Perspectives*. New York: New York University Press, 2005.

Simon, John Y., ed. *Ulysses S. Grant: Memoirs and Selected Letters, Personal Memoirs of U.S. Grant, Selected Letters 1839-1865*. New York: The Library of America, 1990.

Smith, Jean Edward. *Grant*. New York: Simon and Schuster, 2001.

Steele, Brett. *Military Reengineering between the World Wars*. Santa Monica, CA: RAND National Defense Research Institute, 2005.

Steele, Dennis. "Setting the Azimuth for Joint Force 2020: Globally Integrated Operations and Mission Command." *Army* November, (2012): 3.

Stiner, Carl and Daniel R. Schroeder. "The Army and Joint Forcible Entry." *Army* (November 2009): 2.

Stucky, Scott W. "Joint Operations in the Civil War." *Joint Forces Quarterly* (Autumn/Winter 1995): 14.

Swielande, Tanguy Struye de. "The Reassertion of the United States in the Asia- Pacific Region." *Parameters*, (Spring 2012): 13.

Symonds, Craig L. *Historical Atlas of the U.S. Navy*. Annapolis, MD: Naval Institute Press, 1995.

Symonds, Craig L., ed. *Union Combined Operations in the Civil War*. New York: Fordham University Press, 2012.

Thompson, Roger. *Lessons Not Learned: The U.S. Navy's Status Quo Culture*. Annapolis: Naval Institute Press, 2007.

Thornton, Dennis A. *Army Transformation: Ill-Advised from a Joint Perspective?* Washington, DC: 2001.

Tol, Jan Van, Mark Gunzinger, Andrew Krepinevich and Jim Thomas. *Airsea Battle: A Point-of-Departure Operational Concept*. Washington, DC: Center for Strategic and Budgetary Assessments, 2010.

Tomes, Robert R. "Military Innovation and the Origins of the American Revolution in Military Affairs." Dissertation, University of Maryland, 2004.

Vego, Milan N. "Major Joint/Combined Operations." *Joint Forces Quarterly* 48 (1st Quarter 2008): 111-120.

Vigoda-Gadot, Eran and Yinnon Dryzin-Amit. "Organizational Politics, Leadership and Performance in Modern Public Worksites: A Theoretical Framework." In *Handbook of Organizational Politics*, edited by Eran Vigoda-Gadot and Amos Drory, 3-15. Cheltenham, UK: Edward Elgar, 2006.

Wass de Czege, Huba. "The Costs and Risks of Airsea Battle." *Army*, November 2011, 20-23.

Whitlock, John L. "Strategic Thinking, Planning, and Doing: How to Reunite Leadership and Management to Connect Vision with Action." In *The Power of Public Service*, 36. Washington, DC: Center for Excellence in Municipal Management, 2003.

Winton, Harold R. and David R. Mets, eds. *The Challenge of Change: Military Institutions and New Realities, 1918-1941*. Lincoln: University of Nebraska, 2000.

Wiser, Edward H. "Union Combined Operations in the Civil War: Lessons Learned, Lessons Forgotten." In *Union Combined Operations in the Civil War*, edited by Craig L. Symonds, 135-151. New York: Fordham University Press, 2010.